BOROUGH OF BOOTLE.

EDUCATION COMMITTEE.

FIRST ANNUAL REPORT,

FOR THE YEAR 1908,

OF THE

SCHOOL MEDICAL OFFICER

ON

Inspection of Children in the Bootle Public Elementary Schools.

Presented to the Elementary Education Sub-Committee on the 16th April, 1909.

Bootle:

BOOTLE TIMES, LIMITED, 30, ORIEL ROAD.

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BOROUGH OF BOOTLE.

HEALTH DEPARTMENT,

TRINITY ROAD,

April 15th, 1909.

To the Chairman and Members
of the Education Committee.

LADIES AND GENTLEMEN,

I beg to submit the First Annual Report on the work carried out under the provisions of the Education (Administrative Provisions) Act, of 1907, with reference to the Medical Inspection of School Children in Bootle during the year 1908.

As far as possible, the Report has been framed upon the plan suggested by the Board of Education in their Circular dated the 17th August, 1908.

Much time has been occupied in organising the work and in arranging matters on a working basis.

The resignation of my colleague, Dr. Beard, four months after his appointment, also retarded progress to some extent, until his successor, Dr. Stitt, took up his duties in June.

Since his appointment, the latter gentleman has done valuable work. His singular aptitude in at once gaining the confidence of the children examined, has been of great benefit in disarming much of the opposition to the medical inspection, which otherwise might have existed.

I have also to here record my thanks for the ready and conrecous manner in which Dr. Stitt has supplied any information, connected with his duties, which I required during the compilation of this report.

During the year 1908 the Medical Officers were able to make a systematic examination of 1,565 children.

The details of the work carried out have been recorded as clearly as possible in the accompanying report.

I am, Ladies and Gentlemen,
Your obedient servant,
WM. DALEY,

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BOROUGH OF BOOTLE.

ANNUAL REPORT

FOR THE YEAR ENDING DECEMBER 31st, 1908,

OF THE

SCHOOL MEDICAL OFFICER

TO THE

EDUCATION COMMITTEE.

Circular 596 of the Board of Education contains specific instructions as to the matters to be dealt with by the School Medical Officer in his Annual Report to the Local Education Authority.

As this report is also for the information of the Board of Education it includes statements of local circumstances and conditions which would be superfluous if only intended for the information of the Local Authority.

In compliance with these instructions, I submit the following account of the work done during the year 1908 with respect to the Medical Inspection of School Children.

There are eleven Elementary Day Schools in the Borongh, giving accommodation for nearly 11,500 children, the average attendance being over 10,000.

APPOINTMENT OF MEDICAL OFFICERS.

The Education Committee adopted the advice of the Board of Education and recommended the Council to appoint the Medical Officer of Health as the School Medical Officer; the salary being fixed at £25 per annum.

As the duties to be performed were obviously more than the Medical Officer of Health could undertake unaided, an additional Medical Officer was at the same time appointed at a salary of £150 per annum, to devote only a part of his time to school work; the remainder being occupied as Surgeon to the Police and Fire Brigade, for which additional remuneration is paid.

The duties assigned to the School Medical Officers are as follows:—

- (a) Duties of Dr. Daley, the Medical Officer of Health.
- 1. Dr. Daley shall be held responsible for the supervision of such medical assistance as may be needed to carry out the medical inspection of children in the public elementary schools, in accordance with the requirements of the Education (Administrative Provisions) Act, 1907, and of the Board of Education thereunder.
- 2. He shall present an annual report made up to the end of the calendar year, dealing with the work done during the year, with full statistics.
- 3. On the ontbreak of any serious epidemic of infectious disease in any of the schools, he shall report to the Elementary Education Sub-Committee, and take the necessary steps to deal with the epidemic.
- 4. He shall, when required, report on the sanitary condition of any or all of the schools.
- 5. He shall attend the meeting of the Education Committee, and when required, any of its Sub-Committees.

(b) Duties of Additional Officer Appointed.

- *1. Dr. Stitt shall make a systematic examination of the children attending the schools, under the control of the Education Committee, and keep the records prescribed in the schedule of medical inspection (accompanying Circular 582 of the Board of Education). All weights and measurements to be according to the metric system.
- 2. He shall, where necessary, instruct the teacher assisting, in order to equip such teacher with the requisite knowledge to assist with the medical inspection of the children. A week's notice to be given to head teachers of an intended general inspection.
- 3. He shall have power to exclude children from school on medical grounds.
- 4. He shall inspect the school rooms and premises and report to the Medical Officer of Health on anything which in his opinion may prejudicially affect the health of the children, particular attention being paid to ventilation, lighting, heating and cleanliness, and recommend such steps to be taken as may be necessary.
- 5. He shall, when required, attend the meetings of any of the Sub-Committees and meetings of managers of Council schools.
 - 6. He shall make a careful record of all work done.
- 7. He shall make periodical reports to the Elementary Education Sub-Committee, and such reports shall pass through the hands of the School Medical Officer.
- 8. He shall perform any other duties as from time to time ordered by the Education Committee.

^{*} So far, the Education Committee have limited the inspection to children entering upon their school career, and to those leaving school.

GENERAL REVIEW OF THE HYGIENIC CONDITIONS PREVALENT IN THE SCHOOLS.

A complete examination of the hygienic conditions existing at each of the eleven schools in the Borough has not been possible, owing to the large amount of time taken up in formulating a suitable scheme for the medical inspection of the scholars.

It was recognised at the outset that the report on any particular school should be complete, so that the expenditure required to place the whole of the school buildings in a good sanitary condition could be definitely arrived at.

So far as the hygienic conditions of the school rooms are concerned, those in two schools only, have been examined, and the report has yet to be considered by the Education Committee.

With respect to the general sanitary conditions of four of the schools, an exhaustive report was submitted to the Education Committee on the 20th November, 1908. This report was referred to the Borough Engineer for his observations thereon. Some of the urgent matters were attended to at once. The remainder of the report had not, up to the 29th March, 1909, been considered by the Education Committee, who await the observations of the Engineer.

STATEMENT OF THE EXTENT TO WHICH THE BOARD'S SCHEDULE OF MEDICAL INSPECTION HAS NOT BEEN FOLLOWED AND THE REASONS FOR SUCH DEPARTURE.

The following is the form of schedule suggested by the Board of Education.

SCHEDULE OF MEDICAL INSPECTION.

I.—Name Address II.—Personal Hi (a) Previous		of C	hild	(befo	_ S	ate of Birth chool nnission).				_
Mensles	Whooping	Coug	h	Chicker	npox	Scarlet Fever Diphtheria	Othe	r Illn	esses	
(b) Family M	Iedical H	istor	y (if	exce	ption	ul).				
		I.	II.	III.	IV.		I.	II.	III.	IV.
1. Date of Inspect 2. Standard and R of Attendance 3. Age of Child 4. Clothing and for [HI.—General Cone 5. Height 6. Weight 7. Nutrition - 8. Cleanliness and dition of skin. Head - Body - [IV.—Special Cone 9. Teeth 10. Nose and throa Tonsils - Adenoids Submax. a eal gland 11. External cyc d 12. Vision -	egularity cotgear - ditions.] ind con- ditions.]			1		13. Ear disease 14. Hearing 15. Speech 16. Mental condition [VDisease or Deformity.] 17. Heart and circulation 18. Lungs 19. Nervous system 20. Tuberculosis 21. Rickets 22. Deformities, Spinal Disease, &c. 23. Infectious or contagious disease 24. Other disease or defect				

General observations.

Directions to Parent or Teacher.

It was considered advisable to alter and to supplement the Board's schedule in some respects so as to facilitate the compilation of statistics, and to obtain useful additional information.

The following schedule was submitted to and adopted by the Education Committee.

2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 A B C D E

BOROUGH OF BOOTLE.

Schedule of Medical Inspection.

PA	RENT PRESENT?						SCHOOL No.	(CHII	D N	lo.			
I	Name Surname first Date of Birth Address School					GENERAL	OBSE	ERVA	ATIC	NS				
A B C D E	PERSONAL Illness of child before admission Measles Scarlet Fever Diphtheria Whooping Cough Chickenpox Other illness FAMILY MEDIC	Illness of child since admission					DIRECTIONS TO PARENTS OF TEACHERS							
	CONFIDENTIAL	I	II	III	IV				I	II	III	IV		
2 8 2a 3 4 5 6 6 6 6 6 7 7 a 8 9 10 11	Date of inspection Standard					12th 12cd 12dd 13 14 15 16 17 18 19 20 21 22 23 24	Throat Tonsils Adenoids Adenoids Submax and Conding Car Disease Hearing Speech Mental Condition Heart and Circulation Tuberculosis Rickets Deformities, Disease, etc. Infectious or Cont Disease Other Disease or	agious						

It will be noted that on the form I recommended for adoption, both the school number and the number opposite the child's name on the school register is to be recorded. This alteration was necessary in order to prevent confusion with reference to children bearing the same name. Each child has a special number on the school register, and by recording this number on the inspection card errors as to the identity of any particular child are obviated.

PERSONAL HISTORY.

In addition to information as to the illnesses from which a child may have suffered before admission to school, it was considered an advantage to also record the illnesses contracted during its school career. By doing so, valuable information, in an easily tabulated form, will, in future years, be at the disposal of the school authorities, so that preventive measures, where these are found possible, can be formulated.

With respect to the remaining portions of the Board's suggested schedule the original plan has been adopted wherever possible. The details of the results of inspection are grouped by the Board under 24 headings. It has been found necessary, in order to avoid confusion in the compilation of statistics, to make the following alterations:—

The heading relating to "Standard and Regularity of Attendance" has been subdivided. The reason for this was that an adverse remark might be necessary under one portion of this heading and not under the other part. These circumstances would require an explanatory note to be made on the very limited space reserved for this item, increasing the clerical work, and leading to complications when compiling statistics.

The same remark equally applies to the heading, "Clothing and Footgear." Many children have unsatisfactory footgear, whose clothing could not be objected to.

By these alterations it has been made possible for the inspecting officer to more easily record any defect and to reduce the making of explanatory notes to a minimum.

It will be observed that on the upper part of one side of the card the figures 2 to 24 and the letters A to E have been printed.

I recommended this to be done in order to facilitate indexing. A metal tab bearing the corresponding number or letter is fixed over that on the card if any defect, previous illness, or abnormality is reported.

As all corresponding numbers are, by this method, arranged in a single row it is possible to compile the statistics for most purposes without taking the cards out of the drawer in which they are kept, thus reducing this portion of the work by more than 50 per cent.

STATEMENT SHOWING THE ASSISTANCE GIVEN TO THE SCHOOL MEDICAL OFFICER BY TEACHERS OR BY OTHER PERSONS.

A teacher is always present whilst the children are being medically examined. They assist the parents in partly undressing and dressing the children and enter the name, address, and age, on the medical inspection card. The teachers also ascertain the previous illnesses of the scholar before admission to school and enter the information on the inspection card.

In many schools the heights and weights of the children are taken and entered on the card by the teachers before the medical inspection begins.

The work has been carried out without the slightest suggestion of friction. The teachers deserve praise for the manner in which they have cooperated with the School Medical Officer, who has been, in consequence, able to carry out his duties with comfort and with dispatch.

METHOD ADOPTED TO SECURE THE PRESENCE OF PARENTS AT THE INSPECTION, AND THEIR CO-OPERATION IN THE SUBSEQUENT TREATMENT OF DEFECTS, TOGETHER WITH A REVIEW OF THE EFFECT OF SUCH METHODS.

The following is a copy of the form sent out by the teacher to the parent in order to secure the latter's presence at the medical inspection:—

Name	BOOTLE EDUCATION COMMITTEE.
Class	Education Act, 1907.
	THE MEDICAL INSPECTION of
	will take place
	at theSchool
	on
Parent Present	at
	THE PARENTS ARE INVITED TO BE PRESENT.

During the year 1908, the children examined numbered 1,565. In 943 instances (60 per cent.) the parents accepted the invitation to be present at the medical inspection. In these cases, the examining officer, Dr. Stitt, had an opportunity of explaining to and enlisting the co-operation of the person responsible for the child's welfare in the subsequent treatment of the defects reported.

At the medical examination, in the case of leaving boys and girls, the parents, although invited, were rarely present, being probably of opinion that these children were themselves capable of giving the necessary information. The attendance of the mothers in the mornings was not so good as in the afternoons, owing, no doubt, to being more fully engaged in domestic duties during the early part of the day.

In specially urgent cases where the presence of the parent was considered important a School Attendance Officer called at the home of the child in order to induce the parent to attend.

In the majority of cases verbal instructions only were given, but towards the latter part of the year, a note was also given or sent to the parent, stating the nature of the defect, if this was considered to require skilled treatment by, a medical practitioner.

The following forms were used for this purpose:-

No.,	No	. =
Bootle	BOOTLE EDUCATION COMMITTEE.	Notice and will
Education Committee.		tice a
	•••••••••••••••••••••••••••••••••••••••	»Z
	Notice of Need for Medical Treatment.	t of
DEFECT.	To the Parents or Guardians of	cknowledge Receipt of atment at once.
	The Medical Officer having examined this	oiio
Name	child finds h to be suffering from	rledg it at
	and on this account treatment	ncknowl eatment
*************************	by a Qualified Medical Man is urgently	I acl trea
	required.	Nosecure
Date	Please sign and return the attached slip.	No

No	No	my
Bootle	BOOTLE EDUCATION COMMITTEE.	egarding t at once.
Education Committee.	-	
		Notice r treatmen
 -		No trea
BAD TEETH.	BAD TEETH.	ipt of ecure Sign
		eceip Il seci
Name	To the Parents or Guardians of The Medical Officer of Schools finds your	ge Red nd will
	child to be suffering from the above defect	wled h, an
· · · · · · · · · · · · · · · · · · ·	and that immediate treatment is required—	know
	otherwise the child's health will suffer.	I's I
Date	Please sign and return attached slip.	No.

CO-OPERATION OF PARENTS IN SUBSEQUENT TREATMENT OF DEFECTS.

Speaking generally, it appears that the parents of the poorer children do not carry out the recommendations or advice of the School Medical Officer, where doing so would entail a financial outlay. On the other hand, the parents of children in fairly good circumstances do, in an appreciable number of cases, act upon the advice given them, and either consult their own doctor or take the child to a hospital.

As a rule, however, the parents readily promise to have the defects attended to, and in minor matters something is done. This is especially noticeable with respect to cleanliness and the condition of the head and body. Of the 152 children adversely reported upon in this particular, 102, representing 67 per cent. of the total, were attended to. In this connection, the Lady Health Visitors have assisted the Medical Officers very much by paying repeated visits to the homes of dirty and verminous children, and in attempting to inculcate in the minds of careless parents what the word cleanliness means.

The Board of Education lays great stress on the importance of home visiting, and in Circular 576 states that—"One of the main objects of the new legislation is to stimulate a sense of duty in matters affecting health in the

homes of the people, to enlist the best services and interest of the parents and to educate their sense of responsibility for the hygiene of their children. The increased work undertaken by the State for the individual will mean that the parents have not to do less for themselves and their children, but more. It is in the home, in fact, that both the seed and the fruit of public health are to be found."

DISTURBANCE OF SCHOOL ARRANGEMENT INVOLVED BY INSPECTION.

In the Council Schools, as the private room of the head teacher is placed at the disposal of the examining officer, no disturbance of school arrangements occurs. In the voluntary schools, however, a private room is not provided for such teachers, and it is here necessary to utilize a small classroom, the children usually occupying that room being removed to some other portion of the school premises.

NUMBER OF VISITS PAID TO SCHOOLS AND DEPARTMENTS.

For	the	purpose	of	medically inspecting the children	103
,,	,,	,,	,,	giving instructions to teachers with reference to such inspections	20
,,	"	,,	"	supervising the disinfection and cleansing of the schools	15
,,	,,	,,	,,	inspecting children suspected to be suffering from infectious disease	35
,,	,,	· ,,	,,	re-examining children in order to learn what results followed the recommendations given to parents	24
"	,,	,,	"	examining school buildings with reference to lighting, heating, sanitary accom-	21
				modation	30
					227

PRINCIPLE OF SELECTION OF CHILDREN FOR INSPECTION.

All children commencing their school life during 1908 have been examined. In July, 1908, the Education Committee directed that children leaving school should also be medically inspected. Both these instructions have been carried out.

CHILDREN REFERRED FOR SUBSEQUENT EXAMINATION.

The examining officer found this was only necessary in such cases as defects of vision, and in these the parents were advised to take the children to a specialist. 169 defects of vision were reported, and 31, representing 18 per cent. of the total, received treatment.

AVERAGE TIME PER HEAD OCCUPIED BY INSPECTION.

The average time is about eight minutes. The examination of a normal child only occupies a few minutes, but in one suffering from some defect a much longer time is necessary.

From the following table it will be noted that of the 1,565 children examined, 975, or 62 per cent. were adversely reported upon. Many of the departures from the normal were not serious and could easily be remedied provided the advice given to the parents by the medical examiner be followed.

NUMBER OF CHILDREN IN RESPECT OF WHOM DIRECTIONS WERE STATEMENT OF SUCH DEFECTS

R—Reported	•	<i>r</i>	Γ — Tr	eated	<i>l</i> .		6	Эх	-E:	xclu	deil											
Corresponding numb	er on ii	ispection	on card	6	3	7	-	8		9		10		11	1	12	1	12	12	3	12	3
School	Total number of children inspected	Number of children found with defects	Percentage of children with defects	Cleanliness and	skin, head	Clothing and	Lookear	External eye	uiscase	Vision		Nutrition		Teeth		Nose		Throat W	Tonsils E		Adenoids	
		0	H	R	T	R	T	R	T	R	T	R	T	R	T	R	TR	T	R	T	R	T
Infants— Bedford Road Salisbury Road Hawthorne Road Gray Street Linacre Lane St. Mary's St. John's Christ Church St. James' Select St. Winefride's Girls— Bedford Road Salisbury Road Hawthorne Road Gray Street Linacre Lane St. John's Christ Church St. John's Christ Church St. James' Select St. Winefride's St. James' Select St. Winefride's St. James' Boys— Bedford Road Salisbury Road Hawthorne Road Gray Street Linacre Lane St. James' Christ Church St. Mary's Christ Church St. Mary's Christ Church St. Winefride's St. Winefride's St. James'	213 120 114 86 89 104 22 58 10 12 28 14 21 5 20 33 17 14 14 13 40 37 14	73 89 44 142 53 91 62 28 82 9 51 10 21 62 19 11 15 3 3 17 20 11 9 22 26 9 9	61·8 55·2 40·7 66·6 44·1 79·8 72·0 31·4 78·8 40·9 87·9 62·5 75·0 60·0 100·0 67·8 78·5 71·4 60·0 60·6 64·7 64·2 35·7 69·2 55·0 70·2 64·2 82·3	6 12 5 10 11 26 27 3 5 36 1 1 1 1 1 3	6 12 5 7 11 26 10 3 5 6 1 1 1 1	3 13 8 12 18 52 35 1 24 51 4 6 4 9		15 8 10 27 4 4 2 1 19 3 7 1 1 1 1 4 1 2 1	6 5 5 11 1 2 1 5 1 1 1	1 3 20 5 1 1 3 10 5 14 2 5 8 5 9 9 1 1 1 12 8 4 1 2 5 9 9 16 3 7 8	2 2 2 1 2 1 2 4 3 2 1	12 10 1 10 12 16 8 4 14 29 2 2	6 5 1 5 6 12 6 2 7 7 1 2 1 1 3	26 13 16 55 32 19 9 23 7 22 8 4 6 7 6 5 2 8 4 10 10 10 10 10 10 10 10 10 10	1	3 6 1 7 8 12 16 1 3	1 4 13 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1 3 3 5 1 3 2	30 19 12 49 23 21 14 25 25 2 5 4 5 6 6 1 4 7 7 5 4 1 1 1 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1 1 1 	14 6 3 23 9 15 7 5 9 16 2 1 2 1 2 1	1 1
	1565	975	62.3	152	102	253		114	42	169	31	128	65 3	310	25	74 2	6 61	19	293	5	113	6

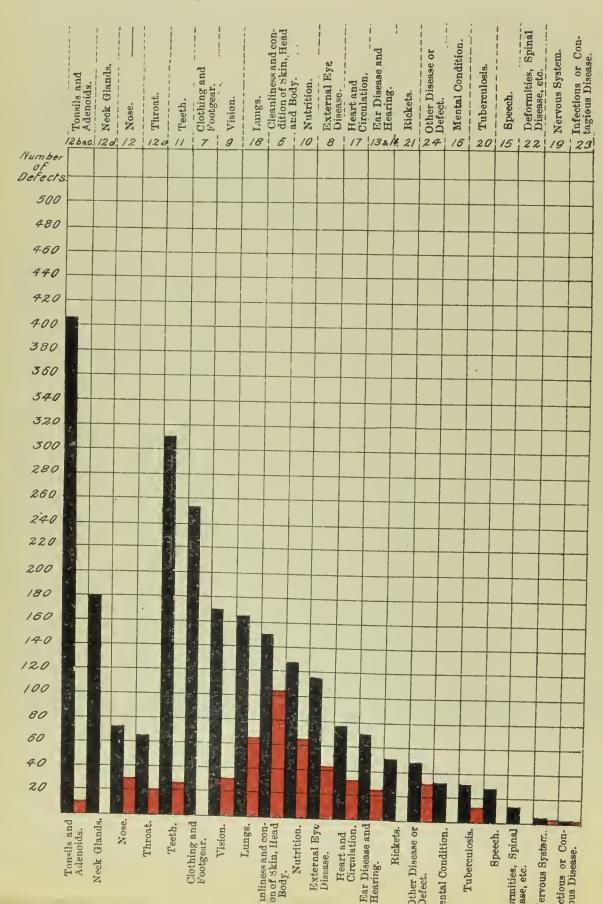
The total defects in the 975 children amounted to 2,383.

GIVEN FOR TREATMENT OF DEFECTS, INCLUDING A CLASSIFIED AND THE NUMBER ATTENDED TO.

12														
R	12	13&14	15	16	17	18	19	20	21	23	-			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Submax and Cervical Glands											Total defects reported	Total defects treated	Percentage of defects treated
	24 9 43 2 4 19 27 4 1	9 2 2 2 1 7 2 6 2 13 1	9 3 4 7 7 7 2 2	6 2 3 1 10 1 1	6 5 3 4 2 2 1 3	12 3 12 5 22 8 5 3 18 4 14 6 11 7 7 1 1 10 2 2 2 1 2 2 2 1 5 2 2 2 1 6 3 3 2 4 2 2 2 2 3 3 2 3 3 2 3 3		6 2 2 6 2 1 2 1 2 2 ex 1 2 1 3 1 2 1 3 1 2 1 3 1 2 1 3 1 2 1 3 1 2 1 3 1 2 1 3 1 2 1 3 1 2 1 3 1 2 1 3 1 2 1 3 1 2 1 3 1 2 1 3 1 2 1 3 1	7 1 2 4 1 2 4 1		6 3 2 2 6 2 6 4 3 2 4 3 3 3 6 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1	181 96 336 153 226 177 79 190 18 248 15 48 14 29 25 31 2 5 34 48 21 17 12 16 45 59 12 15 33	39 26 53 34 56 40 12 38 2 29 3 11 & 4 ex. 2 7 13 4 13 — 1 6 9 7 2 1 15 9 6 2 10	21·5 27·0 15·7 22·2 24·7 22·6 15·1 20·0 11·1 11·6 20·0 22·9 14·2 29·1 44·8 16·0 41·9 Nil. 20·0 17·6 18·7 33·3 11·7 16·6 6·2 33·3 15·2 50·0 13·3 30·3

GENERAL REVIEW OF THE FACTS DISCLOSED BY MEDICAL INSPECTION.

In order to more clearly demonstrate the number, and the importance of the defects found in the children, the following chart has been prepared. This shows the total defects reported (black columns) and those remedied (red columns) for each of the items numbered 6 to 24 on the medical inspection card.



NOSE, THROAT, TONSILS, ADENOIDS AND NECK GLANDS.

It will be at once seen that adenoids and enlarged tonsils head the list with 406 defects, and that out of this very large number only 11 cases were treated.

Surgical interference has not been recommended in the majority of cases of enlarged tonsils in infants, as this condition has a marked tendency to improve as the child grows older. The breathing and other school exercises are important factors from a curative point of view.

With respect to adenoids, 113 children were adversely reported upon, and at least 30 of these required urgent surgical operation. Many promises were made by the parents to have their children attended to. The promises, however, were rarely carried out. In only 6 cases was the advice of the medical examiner followed.

In cases of nasal cataurh, simple laryngitis, &c., where home treatment is effective, some cures have been brought about.

Enlarged neck glands (cervical and submaxillary) were found in 181 cases. A large number of these was due to the verminous condition of the head, and after suitable treatment, cures were effected. In the remaining cases no surgical operation, beyond the extraction of carious teeth and the removal of adenoids, was recommended.

TEETH.

In tabulating the statistics for teeth it was found necessary to adopt some definite plan in addition to noting the general condition and cleanliness of temporary and permanent teeth and amount of decay.

The method adopted has been to classify the teeth as—

(1) Good. (2) Savable. (3) Bad.

Temporary. Permanent. Temporary. Permanent. Temporary. Permanent.

Very few children were found possessing a sound set of teeth. A still larger number had defective teeth, which could be classified under the second heading.

310 children, or nearly 20 per cent. of the total examined, were found to have bad teeth. Any child possessing four or more of such teeth beyond

repair was placed under the third heading. In these, extraction was recommended, but in only 25 cases, or 8 per cent., was the advice carried out. Many parents refused to employ a dentist because the child did not complain of toothache, or, that they thought the defective teeth would come out themselves in good time. I am informed that in the lectures on personal hygiene the importance of cleanliness of the teeth and the daily use of the tooth-brush is impressed upon the children. The result of such teaching as revealed by medical inspection is discouraging. Probably, if what is termed "tooth drill" was properly organised and carried out in the schools, the results would more than compensate for the trouble involved.

CLOTHING AND FOOTGEAR.

No improvement seems to have taken place as a result of medical inspection.

253 children, representing 16 per cent. of the total examined, were found to be improperly clothed or shod. Many children, however, have received help in this respect from philanthropic sources. The Bootle Canteen Committee and the teachers themselves having accomplished much good work by providing the worst cases with clogs and clothing.

VISION.

Children under six years of age do not have their eyesight tested, unless special attention is drawn to vision. In those examined, 169 suffered from this defect, and in nearly all of these cases glasses were recommended. Only 31 children, representing 18 per cent. of those requiring treatment, adopted the advice.

In the case of boys leaving school, who suffer from defective vision, the medical officer has on many occasions been informed that if the advice to provide the boy with suitable spectacles was carried out, he would not then be able to obtain employment. This is said to have been the experience of several boys, who have, whilst wearing spectacles, sought work without success, but, once the glasses were discarded, employment was obtained with less difficulty.

EXTERNAL EYE DISEASES.

114 defects were reported, and of these, 42, or 36 per cent. were treated and in most cases cured. The greater number of these cases were either

Blepharitis or Strabismus. In the latter condition glasses were recommended, but seldom obtained. In the former, simple treatment resulted in many cures.

LUNGS.

Many of the cases were bronchial in their nature and of a simple character. The number reported was 165, and of these, 66, equal to 40 per cent. of those affected, received treatment.

Eight of the children were found to be suffering from Phthisis. In every case where the child was considered to be a source of danger to others, attendance at school was discontinued.

CLEANLINESS AND CONDITION OF SKIN, HEAD AND BODY.

In addition to the remarks made on this subject on page 13 of this report, it may be well to observe that many parents, on receiving notice of the medical inspection of their children, at once proceed to bath and cleanse them. The children were, therefore, at the time of inspection, usually in a well dressed and cleanly condition.

NUTRITION.

Although many of the children in Bootle attending the elementary schools are under the normal standards of height and weight, it would be incorrect to describe them as suffering from mal-nutrition. They are simply undersized boys and girls, in the great majority of cases, well nourished and cared for.

The cases of mal-nutrition numbered 128, and of these, 65, amounting to about 50 per cent. of the total, were more favourably reported upon when reexamined at a later date.

The cause of this condition was in some cases the want of food, and in others, actual disease. In the former, the extreme poverty of some of the inhabitants during the past year is no doubt accountable, to a large extent, for the majority of the cases. Some improvement followed the provision of free meals in the schools. The visits of the Lady Health Visitors, and the efforts of various charitable institutions, have also led to good results.

In the cases of mal-nutrition, due to actual disease such as tuberculosis, little or no improvement was noticeable.

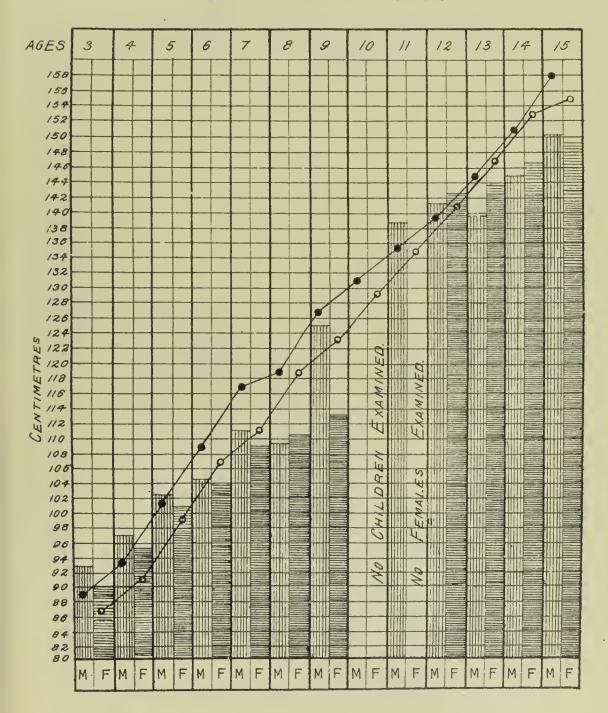
The following table gives the average height and weight of the children inspected (according to age at date of inspection and sex):—

Age.		mber of Inspected.	i	Height n netres.	Average Weight in Kilos.			
	Males.	Females.	Males.	Females.	Males.	Females.		
3	7	12	93.0	90.0	13.7	18.5		
4	39	32	96.9	95.5	15.5	15.8		
5	259	279	102.2	100.8	17.1	17.8		
6	217	189	104.3	103.9	17.9	17.5		
7	70	70	111.2	108.8	19.5	18.8		
8	18	25	109.5	110.2	20.2	20.0		
9	2	4	125.0	113.0	27.3	20.4		
10	_		_		_	_		
11	1		139.0		32.7			
12	15	6	141.4	142.6	35.4	33.7		
18	35	55	139.9	143.9	84.0	36.5		
14	109	103	144.9	146.6	87.5	38.8		
15	12	6	150.1	149·1	40.0	37.5		
	784	781 =	1,565. T	otal number	of children	examined.		

In order to more clearly demonstrate the difference between the average height and weight of local children, and the average for similar children throughout Great Britain, the following charts have been prepared.

They show the average height (without shoes) and the average weight (with clothes) of school children in Bootle, classified according to age and sex, and similar information relating to the general population of this country.

AVERAGE HEIGHTS IN CENTIMETRES OF SCHOOL CHILDREN IN BOOTLE COMPARED WITH THE HEIGHTS OF CHILDREN IN THE COUNTRY GENERALLY AT CORRESPONDING AGES.



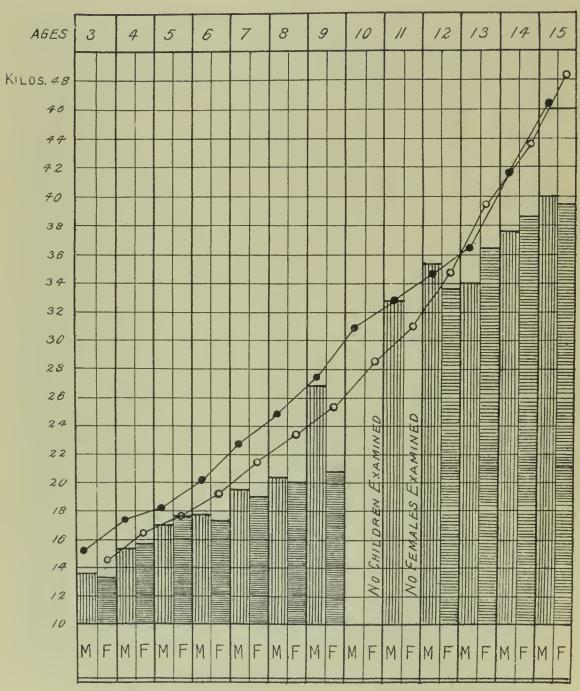
M - Males.

F - Females.

Denotes average heights of Children in Bootle at corresponding ages.

[•] o ,, ,, ,, Great Britain at corresponding ages.

AVERAGE WEIGHTS IN KILOS OF SCHOOL CHILDREN IN BOOTLE COMPARED WITH THE WEIGHTS OF CHILDREN IN THE COUNTRY GENERALLY AT CORRESPONDING AGES.



M - Males.

F * Females.

Donotes average weights of Children in Bootle at corresponding ages.

[•] o ,, ,, ,, Great Britain at corresponding ages.

In forming deductions, however, as to the average height and weight of children in Bootle, as shewn by the tables and charts, it must be noted that some of the averages, e.g., those relating to children at ages 3, 4, 8, 9, 11, 12 and 15 respectively, are based on very small numbers. Too much significance must not be placed upon them, they simply show the results as far as has yet been ascertained.

HEART AND CIRCULATION.

The majority of the children reported under this heading suffered from Anamia, and in these some improvement took place owing to the provision of free meals, &c. Comparatively few cases of organic disease of the heart were found. 76 defects were reported, and 34, representing 44 per cent., received some treatment.

EAR DISEASE AND HEARING.

70 defects were noted. The number attended to was 23, equal to 32 per cent. of the total. The hearing of the children examined was generally good. Many of the cases of deafness were due to the presence of Adenoids, whilst others could be referred to accumulations of wax in the ears, or to a previous attack of Scarlet Fever. No really serious condition was reported under this heading.

RICKETS, DEFORMITIES, SPINAL DISEASES, SPEECH.

The medical examiner has no special remarks to make on these cases. 53 children were reported to be suffering from the effects of Rickets, 14 from Spinal Diseases, Deformities, &c., and 31 from defects of speech, including lisping and stammering. In none of the cases could improvement be reported.

TUBERCULOSIS.

36 children were found to have tuberculosis in one or other of its forms (glandular, osseous or pulmonary), and 11 of these received some treatment. Those suffering from the pulmonary form, the one most dangerous to others, have already been referred to under the section of this report dealing with the lungs.

MENTAL CONDITION.

37 children were adversely reported upon. With these exceptions, the mental condition of those examined in the elementary schools was found to be excellent, very few being dull or backward.

During the year under review mentally defective boys and girls, who could not be received into ordinary schools, have been sent to the ORWELL ROAD SCHOOL FOR MENTALLY DEFECTIVE CHILDREN, by arrangement with the Liverpool Corporation. They were conveyed to and from the Institution every school day in an omnibus provided by the Bootle Education Committee.

The Committee, however, came to the conclusion that the very small amount of benefit the children seemed to obtain at this school did not warrant the expenditure incurred and, therefore, the arrangement has been discontinued since the 31st December, 1908.

INFECTIOUS OR CONTAGIOUS DISEASES.

Of the 1,565 children systematically examined, only two were found to be, at the time, suffering from an infectious disease. One was a case of Chickenpox and the other had contracted Measles. Both were at once excluded from school.

On 35 occasions the School Medical Officers made special visits to schools when cases of Measles and Scarlet Fever were unusually prevalent. They excluded a number of children from school where this course was considered advisable.

OTHER DISEASES.

Under this heading are included skin diseases and such defects as phymosis, prolapsus ani, &c. Of the 48 cases reported 32 received treatment.

A great deal of good has resulted from the efforts of the Bootle School Canteen Committee in providing free meals for hungry children. From a report by the Secretary of the Committee on the work done during the three months ended April 3rd, 1908, it is seen that 38,598 breakfasts were given to these children, the daily average being 603. The cost per meal averaged 1_6^4 d. In addition to this, the Committee expended £39 19s. 2d. in providing boots and clogs for poor school children.

It will be seen from the portion of this report dealing with nutrition that a marked improvement in the health and physique of many of the children has resulted from the work accomplished.

ARRANGEMENTS FOR OPEN-AIR SCHOOLS, SCHOOL CAMPS, &c.

No arrangements for open-air camps have been made. In the summer, however, when the weather permits, classes are held in the playgrounds, with beneficial results to the children. An extension of this open-air method of teaching is bound to be followed by further good results.

PREVIOUS ILLNESSES OF THE 1,565 CHILDREN EXAMINED.

912, o	r 58 p	er cent.,	had suffe	red from	Measles	before co	mmencing s	school life.
559, o	r 35	15	11	17	Whooping Cough	1.	7 7	7.7
293, o	18^{3}_{4}	11	* ;	٠,	Chickenpox	* 7	17	21
117, o	$r = 7\frac{1}{2}$	11	7.7	2.7	Scarlet Fever	7.7	17	21
23, o	$1\frac{1}{2}$	2.1	7.7	11	Diphtheria	1.2	11	,,

The above information deserves consideration, especially when, during a threatened epidemic of Measles, the question of school closure arises. It would appear from the figures available that only 42 per cent. of the school children are not protected by a previous attack of the disease. It must, however, be remembered that probably 80 per cent. of the patients were not attended by a medical practitioner, and the diagnosis, in many of the cases of Measles and of the other diseases mentioned above, would be inaccurate.

PERSONAL HYGIENE AND TEMPERANCE TEACHING.

A course of personal hygiene is taught in each school. Amongst other matters, the importance of cleansing the teeth being urged upon the children.

The result of this teaching is not satisfactory, as shown by the statistics contained in this report.

The importance of cleanliness of the head and body, although taught, does not seem to be appreciated.

This is no doubt due to the lack of interest some parents appear to take in their children. It seems clear, from the experience of the School Medical Officers, that the home environments of the child require attention as urgently as the school surroundings. In this respect, domiciliary visits by the Health Visitors have resulted in some improvement.

Lectures on temperance are given at stated periods to the scholars in the senior departments. On several occasions the School Medical Officers have attended these demonstrations and consider the subject is taught in a thoroughly conscientious manner. The lecturers seem to be very earnest in their work and take great pains to impress upon the children the importance of the matters dealt with. Such lectures, conducted on proper lines, are bound to have a beneficial effect on the future life and career of the scholars.

REVIEW OF METHODS EMPLOYED OR AVAILABLE FOR THE TREATMENT OF DEFECTS.

In the case of defects of vision, where the parents are too poor to provide spectacles, the local authority have made arrangements to provide suitable ones free of charge.

Where the children are found to be suffering from skin disease, or from vermin, visits have been paid to the homes of the children, and, if necessary, repeated by the Lady Health Visitors, with good results. In the great majority of the cases a complete cure has been effected, and in others a considerable improvement.

REVIEW OF ACTION TAKEN TO DETECT AND PREVENT THE SPREAD OF INFECTIOUS DISEASE, INCLUDING REFERENCE TO ACTION TAKEN UNDER ARTICLES 45 (b), 53 (b) and 57 OF THE CODE OF 1908.

During the year 1908 the Medical Officer of Health, who is also the School Medical Officer, received from the Head Teachers or from the Clerk to the Education Committee 826 notifications of the supposed existence of cases of infectious disease amongst school children.

The following table gives the number of cases of Measles, Chickenpox, Whooping Cough, or other infectious illness reported in this way:—

School.	Measles.	Chickenpox.	Whooping Cough.	Other Diseases.	Totals.
Salisbury Road	16	19	_	29	64
Hawthorne Rd.	5		13		18
Linacre Lane	56	4		1	61
Bedford Road	28	5	6	14	53
Gray Street	87	6	_	8	101
St. James'	18	10	95	5 7	180
St. Mary's	24	_	35	34	93
Christ Church	8		4	7	19
St. John's	64	4	13	21	102
St. Alexander's	8	7	12	36	63
St. Winefride's	6	9	24	33	72
Totals	320	64	202	240	826

Owing to the prevalence of Measles among the scholars in the Infants' Departments of Gray Street, Linacre Lane and St. John's Schools, it was

considered advisable to close these portions of the schools for a period varying from two to three weeks.

The total number of cases of Measles reported by the teachers in 1908 was 320. This does not include those cases in which the children were below school age, and therefore did not attend school.

It will be seen from the results of the medical inspection of children commencing their school life that 58 per cent. were said to have suffered from Measles before joining school.

It also appears probable that about one-half of the children, who have not previously suffered from Measles, contract this disease during their stay in the infants' department of their school.

Unfortunately, Measles is infectious for two or three days before the rash appears, and an infected child has, in the meantime, ample opportunity to spread the disease before it has been definitely recognised as Measles.

These factors render it extremely difficult to check an ontbreak when once the disease has broken out amongst the younger children of the infants' department.

Experience during the past year, however, seems to show that in some cases it is still possible to check a threatened outbreak of Measles, providing the teachers exercise great care in carrying out the instructions supplied to them by the Medical Officer of Health, *i.e.*, to at once exclude a suspected case and report the matter to the Health Department.

In connection with this subject the following particulars relating to outbreaks of Measles in five of the schools show clearly that the disease may sometimes, without school closure, be prevented from spreading, if exclusion of infected scholars be promptly enforced:—

School.		Total No. of Cases during the year 1908.	Month Reported.	No. of Cases.
Hawthorne Road		5	Nov.	5
Salisbury Road		16	Jany.	2
			Sept.	9
			Oct.	5
St. James'		18	June	1
			July	11
	1		Oct.	6
Christ Church	• • •	8	Jany.	3
			April	1
			June	3
		1	Oct.	1
St. Winefride's		6	Jany.	1
			Feby.	1
			March	2
			Aug.	1
			Sept.	1

Although Whooping Cough became unusually prevalent during the early part of the year it was not considered necessary to close any of the schools for this cause.

It was, however, found advisable just before the Christmas holidays to close the Infants' and the Girls' Departments of one school in consequence of the increasing incidence of Scarlet Fever amongst the scholars.

The number of visits made by the officers of the Health Department to cases of illness of scholars reported by teachers and others will be seen from the following table:—

		Total No. Visited,	No. found not suffering as Reported.		
Measles		371	1 * *	56	
Chickenpox		85		10	
Whooping Cough	100	249	***	39	
Other Diseases		573	•••	42	
		1 070		147	
		1,278		147	

CONCLUSION.

During the year under review it has not been possible to do much more than to inaugurate and to place on a working basis the scheme of Medical Inspection. Many undesirable and preventable conditions have been found to exist, but it is yet too early to definitely state the exact form remedial measures shall take.

It, however, seems perfectly clear that in order to bring about the good results aimed at, the homes of the defective children must repeatedly be visited. In far too many cases it is found that the parents require instruction in the habits of cleanliness and personal hygiene, and that the examples set by those at home minimise to a great extent some of the good which might otherwise accrue.

Eventually, when in their turn the present generation of school children become the heads of families, the full benefit of what is now being done for school children will be realised.



REPORT

ON THE

Health of the County Borough of Bootle for the Year Ending Dec. 31st, 1908,

BY

WILLIAM DALEY,

L.R.C.P. (EDIN.), D.P.H. (LOND.),

Medical Officer of Health of the Borough,

Medical Officer of Schools.

BOOTLE:
BOOTLE TIMES LIMITED, 30, ORIEL ROAD.

1909.

HEALTH COMMITTEE

OF THE

BOOTLE TOWN COUNCIL,

1908-9.

*Mr. Alderman Cain, J.P., Chairman.

*Mr. Alderman Wild, M.D., J.P., Deputy-Chairman.

*Mr. Councillor Barbour.

Mr. Councillor Bell.

Mr. Councillor Booth.

*Mr. Councillor Cromie.

*Mr. Councillor Duthie.

*Mr. Councillor Ellison.

Mr. Councillor Hanlon.

Mr. Councillor F. W. King.

*Mr. Councillor McCormack, M.R.C.S.

*Mr. Councillor Pearson, M.R.C.S.

Mr. Councillor Scholefield.

Mr. Councillor Short.

Mr. Councillor Watson.

and

HIS WORSHIP THE MAYOR (Mr. Councillor Randall).

^{*} Members of the Hospital Sub-Committee.

Officials of the Public Health Department.

Medical Officer of Health:

WM. DALEY, L.R.C.P. (Edin.), D.P.H. (Lond.).

Assistant Inspector of Nuisances and Inspector under the Sale of Food and Drugs Acts:

*R. J. McCulloch.

Sanitary Staff:

*H. V. SMITH.

J. LOBB (Disinfecting Workman).

J. WALL ,, ,, ,,

F. RYDER.

R. Morley.

Lady Sanitary Inspector and Inspector under the Midwives Act:

*Miss Ada Stott.

Lady Health Visitor:

*Mrs. McKowen.

Those marked * are Certified Inspectors.

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HEALTH DEPARTMENT,

TRINITY ROAD,

March 25th, 1909.

To the Chairman and Members

of the Health Committee

of the County Borough of Bootle.

GENTLEMEN,

I have the honour to present my Annual Report for the year 1908.

The death-rate is the second lowest ever recorded, and may therefore be considered satisfactory.

During the year a large amount of useful work has been accomplished, and this, I trust, will pave the way to a further reduction both in the gross death-rate and in the Infantile Mortality rate of future years.

All the Inspectors have given me great assistance since my appointment as Medical Officer of Health, and I have to thank them for their wholehearted support.

I desire also to place on record the courtesy and consideration with which any suggestion I have brought forward has been received by the Health Committee and by the Council.

I am, Gentlemen,

Your obedient servant,

WM. DALEY,

Medical Officer of Health.

STATISTICAL SUMMARY FOR 1908.

Area in Acres	• • •	• • •		•••		1,946
Estimated Populatio	n, June,	1908	•••	• • •		70,500
Population per Acre	(ex c ludir	ng Dock	Estate)		48
No. of Houses in Bo	rough			•••		13,671
Rateable Value	• • •		• • •	• • •		£539,732
1d. in the £ yields fo	r Genera	l Distri	et purpo	oses	• • •	£1,440
Number of persons p	er house	at time	of last	Census		5.8
Birth Rate per 1,000	living			•••	•••	30.9
Death Rate ,,				•••		17.3
Infantile Mortality p	er 1,000	births	• • •			143
Percentage of Uncert	tified dea	ths				3.4
Total deaths from D	iarrhœa	• • •	• • •	• • •		53
Diarrhœa Mortality I	per 1,000	births		• • •	• • •	24
Death Rate from Ph	thisis per	1,000 l	iving		• • •	1.4
Death Rate from Dis			_		_	
1,000 living						3.7

BOROUGH OF BOOTLE.

Annual Report

OF THE

MEDICAL OFFICER OF HEALTH

TO THE

HEALTH COMMITTEE.

Bootle is a County Borough, and is 1,946 acres in extent, excluding the bed of the River Mersey. It is bounded on the south and east by the City of Liverpool, on the north by the Urban Districts of Waterloo-with-Seaforth and Litherland. The western boundary of the Borough abuts on the mouth of the River Mersey.

The land fails from east to west, i.e., towards the river. The highest parts are situated in the extreme north-east and south-east boundaries, and reach a height of 125 feet above mean sea level. The lower portions, adjoining the docks, are from 22 to 24 feet above mean sea level.

POPULATION.

The population estimated to the middle of the year 1908 was 70,500.

The census returns shew the number of inhabitants in the year 1881 to have been 27,374; in 1891, 49,217; and in 1901, 58,556.

Approximate population of the Borough at the undermentioned age periods on an estimated population of 70,500.

Und	ler 1	year			o a o	• • •	1,952	
1 ye	ar a	nd ui	nder 5	• • •			6,747	
		Tot	al und	er 5				8,699
5 у	ears	and	under	15		• •	* * *	15,219
15	, ,	1 9	, ,	25	• • •			14,411
25	2.2	, ,	2.3	45		• • •		20,175
45	,,	,,	3 3	65	• • •			10,160
65	7.7	,,	upwa	rds				1,836
								70,500

The following table gives the area of each Ward:-

Ward	Area excluding	Dock E	state A	rea includin	g Dock Estate
Derby	451	acres	* * *	451	acres.
Stanley	235	, ,		235	* 9
Mersey	174	* 9		312	31
Knowsley	176	,,	••	306	11
Linacre	203	2.2		272	٠,
Orrell	370	, ,	•••	370	"
	1,609			1,946	

The number of persons in each Ward is estimated to be as follows:-

Ward			Population	Person	s per acre	e excluding Dock Estate
Derby			12,840	• • •		28
Stanley			11,906		***	50
Mersey			14,851		***	85
Knowsley	• • •	• • •	12,406	• • •	• • •	70
Linacre			14,480			71
Orrell	• • •		4,017	• • •		10
Т	otal	•••	70,500			

In the new memorandum of the Local Government Board relating to the Annual Report of the Medical Officer of Health, that officer is required to include in his report some definite information as to the general conditions of the population and the influence of any particular occupation on public health.

In compliance with this instruction the following observations may be unade.

Bootle has neither distinctive nor characteristic industries and its contiguity to other areas of population render it difficult to determine specifically the effect of occupation upon health. Very few diseases of occupation come under the cognizance of the Medical Officer of Health, and even in such cases many of those living in the Borough are employed outside it. The one outstanding fact, however, bearing greatly upon the general condition of a large section of the population, is the widespread effects of the casual nature of employment at the docks. In long periods of depression the results of semi-starvation in the poorer districts are brought to the notice of the Health Department in connection with the operations of the Bootle Health Society, the work of the Lady Sanitary Inspectors, and the Medical Inspection of School Children. There is no doubt that the health and physique of the children of many respectable artisans are seriously and permanently impaired by their very straightened circumstances during prolonged depressions in the shipping trade.

The average wage of a dock labourer has been said to amount to 18/per week. The Liverpool Statistical Society, however, have computed that this estimate is somewhat over-rated.

Unfortunately there are very few small self-contained houses at a rental within the reach of this limited income, and consequently houses let in lodgings or occupied by members of more than one family are very numerous in some parts of the Borough.

The uncertainty of casual employment at the docks and the low total of the yearly income, are factors which reduce the standard of living and lead to sub-letting and under-feeding. It is a fact also that amongst this class of the population there is more improvidence and excessive drinking; conditions which lead inevitably to physical, mental, and moral deterioration, and to a high rate of infantile mortality.

TABLE SHOWING NEW HOUSES ERECTED SINCE THE LAST CENSUS.

	Year			Derby		Stanl	ey I	lerse	y Kı	nows	ley	Linac	re	Orrel	1	Totals
April	1901—April	1902	•	110		—		8		_		169		-		287
7 9	1902— ,,	1903		126		28						85				239
"	1903— ,,	1904		91		28			• • •	30		132		-		281
,,	1904— ,,	1905		135	•••	76			• • •	1		143	• • •	—		355
2.5	1905— ,,	1906		278		52		—		-		214				544
, ,	1906 — ,,	1907		190		25			• • •	—		110	:	*26		351
,,	1907— ,,	1908		73		64		1				51		11		200
Jan.	1908—Jan.	1909		46		52				_		14	• • •	21		123

The population per house at the last census was 5.8.

Very strict supervision is exercised by the Borough Engineer over the erection of new houses.

• Included in Borough for first time.

The drains receive special attention, and must withstand the water test before being passed as satisfactory. A certificate as to fitness for habitation is not given until an Inspector from the Health Department has inspected and approved of the new premises.

Previous to the year 1900 the Council demanded that back passages adjacent to new houses should be at least 4 feet wide. Since that date, however, a 9 feet back passage is insisted upon.

This improvement is greatly appreciated, and besides facilitating the removal of house refuse, has improved the circulation of air at that portion of the premises where it was greatly needed.

BIRTHS.

During the year 1908, 2,182 births were registered. Of these 1,084 were males, and 1,098 were females. The birth rate per 1,000 of the population is therefore 30.9; the average of the previous 10 years being 31.4.

The chart on page 13 shows at a glance the variations in the local Birth Rate since 1891.

The rate for the whole of England and Wales during 1908 was 26.5 per 1,000, i.e., 4.4 lower than that of Bootle.

In the following table the variations in the number of births, and in the birth rate in each Ward, are indicated:—

Ward	1st Quarter	21	nd Quarter	31	rd Quarte	r 4t	h Quarte	er	Total	Rate
Derby										
Stanley	78		76	,	62	,	62		278	23.3
Mersey	129		116		101		69		415	27.9
Knowsley	101		83 .		102		95		381	30.7
Linacre	129		116		137		115		497	34.3
Orrell	31		34		40		37		142	35.3
Entire Boroug	h 576		550	• • •	560		496	2	2,182	30.9

The illegitimate births recorded this year numbered 35, equal to 1.6 per cent. of the total births. In the previous year only 22 illegitimate births were registered. It would probably not be correct to assume from this that a real increase in the number of illegitimate births has occurred. Careful enquiries lead to the conclusion that, one effect of the Notification of Births Act, 1907, has been to secure more accurate information in this respect.

The illegitimate births were distributed among the Wards as follows:—

Derby		Stauley	Mersey	Knowsle	y	Linaere	Orrell	
5		4	 10	 9		5	 2	
1.06%	• • •	1.4%	 $2\cdot 4\%$	 2.3%		1%	 1.4%	of total births
								in each ward.

The natural increase of the population is shown in the following table:—

Ward	Births	Deaths	Excess	of Births over Deaths	3
Derby	469	 189		280	
Stanley	278	 152		126	
Mersey	415	 304		111	
Knowsley	381	 260		121	
Linacre	497	 266		231	
Orrell	142	 54		88	
Intire Borough	2,182	 1,225		957	

NOTIFICATION OF BIRTHS ACT, 1907.

 \mathbf{E}

This Act has been adopted by the Council and came into operation on the 7th January, 1908.

The objects of the Act are (in the words of the Local Government Board) "the giving of advice and instruction to those in charge of infants."

In order to ensure that its provisions would be known by the public generally, an advertisement was issued in the local paper giving the necessary particulars. In addition to this all the Medical Practitioners of the Borough, together with the Midwives practising in Bootle, were sent a circular letter by the Town Clerk.

The number of births notified under this Act during the year amounted to 1,882. This is equal to 86% of the total births registered with the local registrar, and may be considered a satisfactory percentage for the first year.

It is interesting to note that—

155 births were notified by the Parents
1,476 ,, ,, ,, Midwives
251 ,, ,, ,, Medical Practitioners

Total 1,882

Several medical practitioners supply their patients with a notification form, and for this reason they can be credited with the notification of the majority of the cases reported by parents.

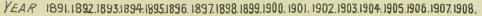
The early information obtained by means of this Act has proved of great value to the Health Department, and no doubt the lives of many children have been saved owing to the advice and instruction given by the Health Visitors to ignorant and inexperienced mothers as to the way in which infants should be cleansed, clothed and fed.

In order to give practical effect to the Act, the two Lady Health Visitors have been relieved, as much as possible, of the other work previously carried out by them, and they now confine their energies mainly to visiting children under the age of one year, and to giving advice and instruction as to the rearing of infants. In this connection alone 9,370 visits have been made by the two Lady Inspectors during the year.

Only one prosecution has occurred under the Notification of Births Act.

The circumstances connected with this case were at the time fully reported in the local papers. The defendant was fined 20/- and costs, and only just escaped being convicted of a more serious offence.

CHART SHEWING BIRTH RATE OF BOOTLE SINCE 1891.



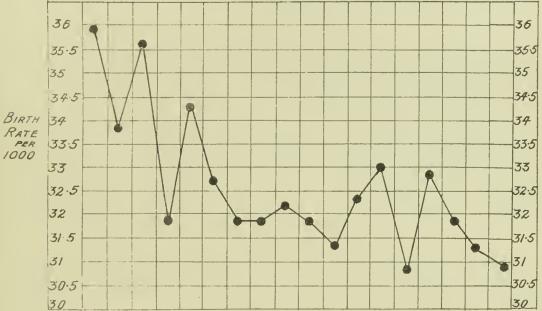
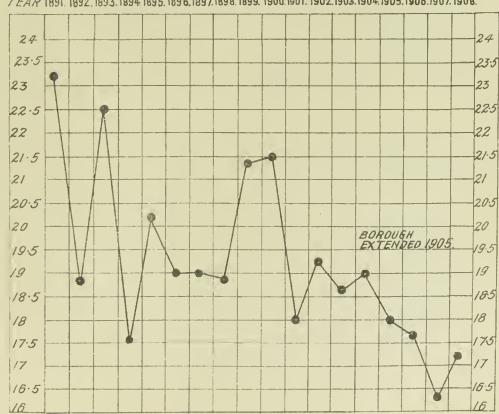


CHART SHEWING DEATH RATE OF BOOTLE SINCE 1891.

YEAR 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908.



DEATH RATE PER 1000.

DEATHS.

The total deaths registered in the Borough during the year amounted to 1,078, giving a death rate of 15.2 per 1,000 of the population. These figures include the deaths of 41 non-residents.

In order to arrive at the correct number of Bootle persons who have died during the year it is necessary to deduct these 41 deaths and to add 145 deaths of persons, said to have been Bootle residents, who have died in the workhouses in Liverpool, together with an additional 43 deaths of Bootle people dying in other public Institutions in Liverpool and elsewhere.

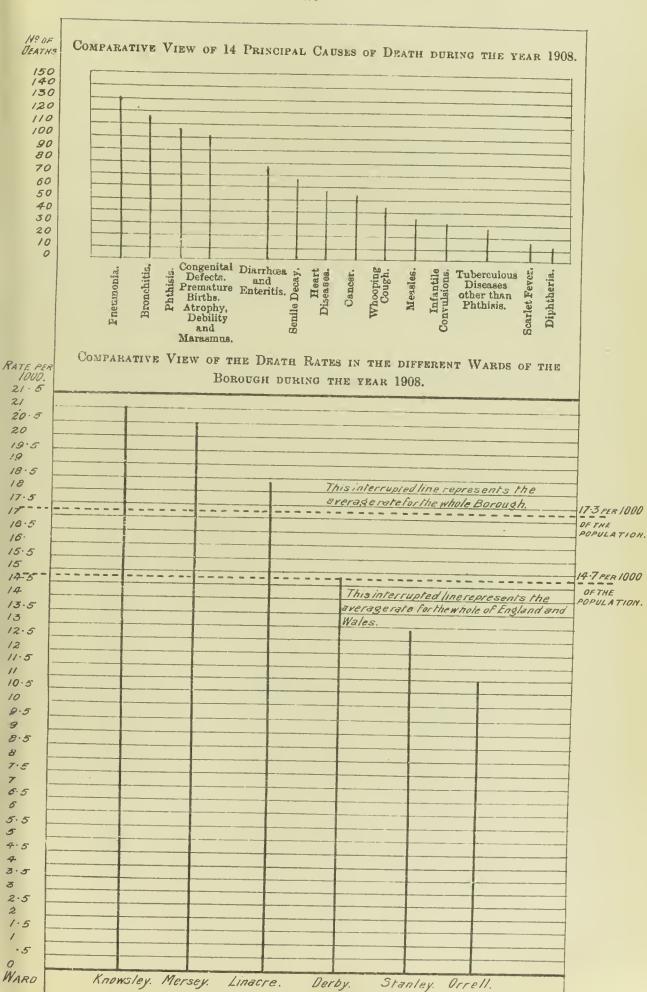
When these adjustments have been made, the total number of deaths assigned to Bootle is found to be 1,225, equal to a death rate of 17.3 per 1,000.

This rate is 2.6 per 1,000 greater than that for England and Wales, and is exactly 1 per 1,000 greater than that for the previous year when calculated on the same basis. With the exception of the year 1907, it is the lowest rate ever recorded in Bootle. The average death rate for the previous 10 years is 18.5 per thousand.

The chart on page 13 gives the local death rate each year for the past 18 years.

The following table shows the number of deaths in each ward, and the respective death rates, for the year 1908.

Ward	1st Quar	ter 2nd	d Quar	ter Bro	l Quar	ter 4tl	ı Quar	ter	Total	Ra	teper 1000)
Derby	51	• • •	40		50		48		189		14.7	
Stanley												
Mersey	99		58	• • •	68		79	• • •	304		20.4	
Knowsley	71		55		65		69		260	• • •	20.9	
Linacre	75		47		82		62		266		18.3	
Orrell	14		5	4	18		17		54		10.9	
Entire Boroug	h 360	_	284		316	_	 815		1 225		17:3	



INFANTILE MORTALITY.

Out of every 1,000 children born during the year 1908, 143 died before reaching their first birthday. On only one occasion (1907) has the infantile mortality been lower. In that year the rate was equal to 123 per 1,000 births. The climatic conditions in 1907 were extremely favourable for a low death rate, and the rates throughout England and Wales were the lowest ever recorded.

The rates in the different Wards for the past eight years are :-

		1901	1902	1903	1904	1905	1906	1907	1908
Derby	 	127	127	151	152	159	112	104	108
Stanley	 	127	113	197	162	148	129	64	111
Mersey	 • • •	277	199	166	234	179	169	183	200
Knowsley	 • • •	194	163	168	183	137	181	125	160
Linacre	 	145	150	136	158	146	140	113	132
Orrell	 • • •					232	100	158	154

Table showing influence of Summer Diarrhea on Infantile Mortality: --

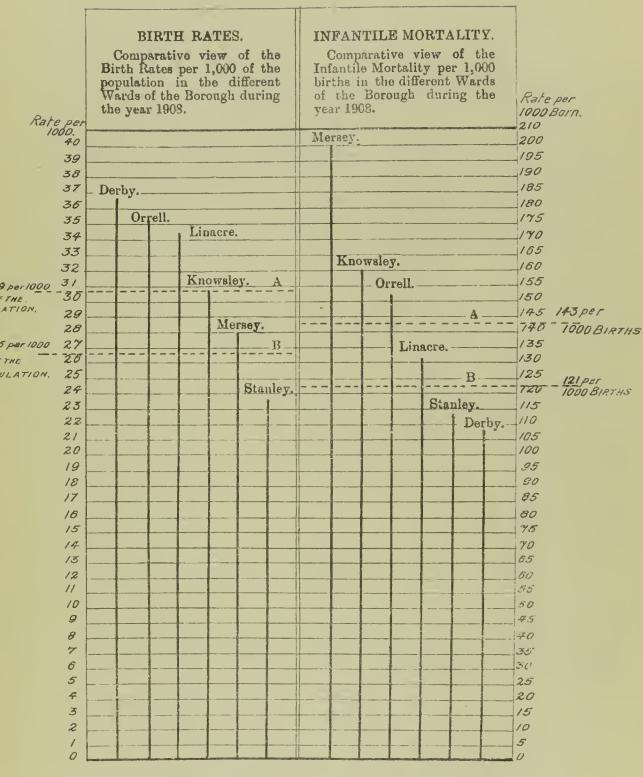
		No. of de	eaths of der 1 y		n	Infant Mortality Rate per 1,000 births				
Year		1906	1907	1908		1906	1907	1908		
1st Quarter	 • • •	75	57	80		137	109	138		
2nd Quarter	 	59	56	53		105	101	96		
*3rd Quarter	 • • •	102	72	108		196	131	192		
4th Quarter	 	76	83	73		139	151	149		

^{*} During the years 1906 and 1908 Summer Diarrhœa was prevalent.

Table showing Infantile Mortality and Diarrhœa deaths:—

			Infantile Deaths	Inf	antile Mortal Rate per 1,000 Births	ity	Deaths from Diarrhœa		Rate per 1,000 of Population
1893		,	351		197	• • •	131		2.5
1894			262	• • •	157		45		.8
1895	• • •		335	• • •	183		107		2.0
1896	• • •		324		184		72		1.3
1897			349		199		153		2.8
1898	• • •		329	• • •	183	,	114	• • •	2.0
1899			337	• • •	186	• • •	146	• • •	2.6
1900			373	• • •	204	• • •	139	• • •	$2 \cdot 4$
1901			337	* * *	183		113	• • •	1.9
1902	• • •	* * *	302		154		58	• • •	·8
1903		• •	325		161	• • •	85	1	1.4
1904			346	• • •	180		109		1.7
1905			311	• • •	153		87	• • •	1.3
1906	• • •		312	• • •	143		83	• • •	1.2
1907			268	* * *	123	• • •	41		•5
1908	•••	• • •	314	• • •	143	• • •	53		.7

Generally speaking, high birth rates are accompanied by high death rates among the infant population, but this does not always follow, as will be seen from the following table:—



A—This interrupted line represents the average Birth Rate per 1,000 of the population in the whole Borough.

B—The corresponding rate for the whole of England and Wales. A—This interrupted line represents the average rate of Infantile Mortality in the whole Borough per 1,000 children born.

B-The corresponding rate for the whole of Englend and Wales, The table shows the birth rate and the rate of infantile mortality in each of the Wards compared with that of the whole Borough, and with that for England and Wales. It will be noted that the highest birth rate, 36:5 per 1,000, is to be credited to Derby Ward, and that the lowest death rate among the infant population (108 per 1,000 births), also occurred in this Ward.

On the other hand the birth rate in Mersey Ward was only 27.9 per 1,000, but the infantile death rate amounted to 200 per 1,000 births. The great disparity between these death rates is worthy of the closest enquiry.

In previous Annual Reports the subject of Infantile Mortality has received a large share of attention; it is therefore unnecessary to go over the whole of the ground again.

It would, however, be interesting to note in what way the conditions existing in Derby Ward differ from those in Mersey Ward. These, if put in tabular form, may be briefly stated as follows:—

MERSEY WARD.

Birth Rate, 27.9 per 1,000 of the population.

Infant Mortality Rate, 200 per 1,000 births.

Large proportion of sub-let houses.

Contains 27 public houses and two off-licensed premises.

The work is mainly casual.

Much poverty.

Most of the property is old, with narrow back entries and small yard space.

Persons per acre, 85.

Population congested; no open space of any size.

DERBY WARD.

Birth Rate, 36:5 per 1,000 of the population.

Infant Mortality Rate, 108 per 1,000 births.

Small proportion of sub-let houses.

Contains 6 public houses and one off - licensed premises. Less facilities for drinking.

More permanent employment.

Little actual poverty, and this is limited to one small area.

With the exception of the Brookhill Road and Waterworks Street area, the property is more modern.

Persons per acre, 28.

All land not built upon. Much open space, including Derby Park.

In addition to these differences, it may be added that in the Mersey Ward district there is more drunkenness. The percentage of illegitimate births is nearly double that in Derby Ward, and there is a larger proportion of ignorant mothers.

It has been frequently stated in the Annual Reports of my predecessor that "the influence of insanitation on the Infantile Mortality Rate is apt to be exaggerated." Apart from this question, all are agreed that the children of drunken, improvident, and ignorant parents, have not the same chance of life as those born under happier circumstances. Much of the loss of infant life is no doubt due to ignorance or callous neglect on the part of the mothers. In the report of the Duke of Devoushire's Committee on Physical Deterioration, this topic was fully discussed, the opinion being expressed that among the younger women of the present day there is evidence of increasing carelessness and a deficient sense of responsibility, which can only be disastrous to the rising generation. The Registrar General states that "it may be confidently affirmed that in future, any permanent reduction in the mortality of young children will largely depend upon a due recognition of parental responsibility on the one hand, and on the other an improved health administration."

In order to bring about a reduction in the local infantile mortality, the Council some years ago appointed two Lady Health Visitors, their work being mainly of an educative character. There is no doubt that the work done by the Lady Health Visitors has been of great benefit to the community, and that they have given to ignorant and inexperienced mothers much valuable advice.

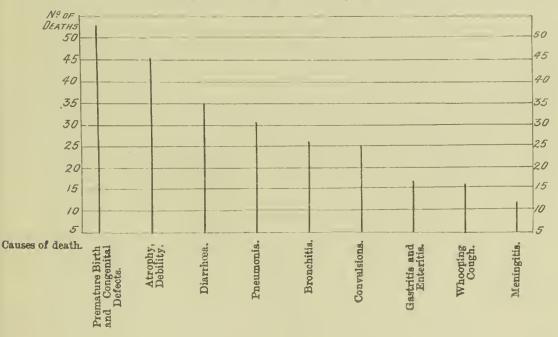
The Health Visitors, however, meet with many cases in which something more than advice is needed. During the past year, in the poorer districts, an unusual amount of poverty has been found to exist. Many mothers of the respectable working class have not been able to properly feed and clothe their offspring, simply through lack of means.

These conditions call for a little kindly assistance from the charitably disposed, and I am pleased to bear testimony to the assistance the Health Department has received during the past year from the Bootle Health Society. The unostentations and practical work accomplished by this

Society has been of great value in maintaining the health of many mothers and their infants. The expense of carrying out this useful work has so far been entirely borne by the lady members of the Society, many of whom have given their time to the work, and are painfully aware of the restrictions imposed by lack of funds.

The following table gives a comparative view of the nine principal causes of Infantile Mortality (below the age of one year) during the year 1908.

COMPARATIVE VIEW OF THE NINE PRINCIPAL CAUSES OF INFANTILE MORTALITY (BELOW ONE YEAR OF AGE) DURING 1908.



During the year 1908 the births of 35 and the deaths of 22 children born ont of wedlock were registered. This shows a terrible sacrifice of life amongst these unfortunate infants, and is equal to an infant mortality rate of 571 per 1,009 births.

It may be of interest to point out that of the 314 deaths of infants, 51 took place within a week of birth, and that an additional 30 only lived for one month.

Of the deaths at this early period of life, about 75 per cent. are due to a group of conditions—premature birth, congenital defects, atrophy, debility and inanition.

On the 23rd of March, 1908, the second National Conference on Infantile Mortality was held in London. This was attended by the Chairman, the Vice-Chairman of the Health Committee, and myself. At this Conference the question was discussed in all its aspects. The Conference formed a very valuable means of ascertaining what was being done by other Local Authorities.

Strenuous efforts are being made in many directions to check the terrible waste of infant life which takes place every year. Admittedly, the first thing requisite is to make the public appreciate the extent of the evil, and then to realise that a very large proportion of these deaths of little children is preventable. Although during the last 30 years the general death rate has steadily fallen, this decrease has its ugly side. Infant Mortality, except within the last few years, has practically remained the same. At the same time it should be pointed out that the climatic conditions have, in recent years, been favourable to infant life, and that the unprecedently low infantile mortality in 1907 coincided with a showery and exceedingly cool summer.

ZYMOTIC DEATH RATE.

Table showing number of deaths from the principal Zymotic diseases since 1897:—

Table showing number of notifications of Infectious Diseases since 1898:—-

	1	898	1	899	1	900	1	901	1	902	1	903	:	1904		1905		1906		1907	,	1908
Population	55,	550	.56,	500	.57,	450	.58	,556	6.60	,000	0.60	,800	0.62	2,00	0.6	3,13	34.6	8,00	0.6	9,20	00.7	70,500
Smallpox		_		_		3		1		25	1	22				_	• •			_		
Scarlet Fever	2	263]	198	2	270	2	285		321	6	353	2	268	2	289		338	2	257	4	198
Diphtheria, in- cluding Croup		21		45		24		64		34		33		48		78		74		52		68
Typhns Fever		36		1		_		12		15		_		_						_	٠.	1
Continued Fever	ľ	_				_		_		_				1	• •	_		_		_		_
Enteric Fever	1	.24		77		97		76		62		61		22		24		40		42		30
Puerperal Fever		2		3		2		6		1	٠.	-		_				6		4	٠.	8
Erysipelas	٠.	41		40		54		51		50		25		39	٠.	32		38		32		34
Phthisis		_														22	• •	18		7		24
				+ P	hth	isis	not	not	ifia	ble v	ıntil	Jul	ly, 1	901.								

The following table shows the number of notifications in each quarter of the year 1908:—

<i>J</i>	1s	t Quarter	2n	d Quarter	3r	d Quarter	4tl	ı Quarter	Totals
Smallpox		_		_		_	• •		 00-000
Searlet Fever	• •	43		90		118		247	 498
Diphtheria	• •	10		10		13		35	 68
Enteric Fever		3	٠.	9	٠.	13	• •	5	 30
Continued Fever		_		_		_		_	
Typhus Fever		1		_		_		_	 1
Erysipelas		17		5		3		9	 34
Puerperal Fever		_		3		3		2	 8
Phthisis		4	٠.	8		4		8	 24
Totals		78		125		154		306	 663

SMALLPOX.

Not a single case of this disease occurred during the past year.

On two occasions, however, cases were notified as Smallpox, and the Medical Officer of Health was invited to see them with the practitioners in attendance.

One proved to be Chickenpox, and the other Syphilis.

A considerable number of Smallpox contacts were reported by the Port Sanitary Authority. These were carefully watched, and were all found to be in good health.

SCARLET FEVER.

The cases were distributed among the Wards as follows:-

	Derby	Stanley	Mersey	Kuowsley		Linacre	Orrell
Cases Notified	136	 56	 65	 62	٠.	153	 26
Cases Removed	82	 25	 45	 45		91	 18

The following table shows the percentage of cases notified as Scarlet Fever removed to Hospital since 1891, with the number of deaths and the percentage of deaths to cases.

Year	Cases Notified		es Notifie per 1,000 Population		Cases Removed		ercentag Removal		Deaths		centage of Death o Notifications
1891	259		· 5·2		29		11		32		12:3
1892			5.7		47		16		32		11.0
1893	332		6.5	• •	89		27		20		6.0
1894.	638		12.2		195		30		36	• •	5.6
1895	300		5.7		124		41	. •	14		4.6
1896.	297		5.5		124		41		20		6.7
1897.	245	L e	4.5		133		54		13		4.9
1898.	263		4.8		162		61		10		3.8
1899.	198		3.5		124		62		10		5.0
1900.	270		4.7		170		62		17		6.2
1901.	285		4.8		202	• •	71		16		5.6
1902.	321		5.4		259		80		14		4.3
1903.	353	• •	5.7	• •	225		63		25		7.0
1904.	269	• •	4.3	• •	210		78	• •	13		4.8
1905.	289	• •	4.5	• •	237	• •	82		32		11.0
1906.	338	• •	4.9	• •	270	• •	79		14	• •	4.1
1907.	257	• •	3.7	• •	200	• •	77		7	• •	2.8
1908.	498	• •	7.0	• •	314		63	• •	17	• •	3.4

During the past 17 years the average number of Scarlatina cases reported per year=360. The numbers for the individual years vary from 198 cases in 1899 to 638 in 1894.

Previous Annual Reports show that at the end of the year 1906 a remarkable drop occurred in the incidence of Scarlet Fever. This continued throughout 1907 and onwards until the first week of August in 1908. During the first seven months of the latter year only 156 cases were notified, but from August 1st to December 31st a further 342 cases were recorded.

The increased prevalence of Scarlatina was not confined to Bootle; Litherland and Liverpool also suffered to a corresponding extent.

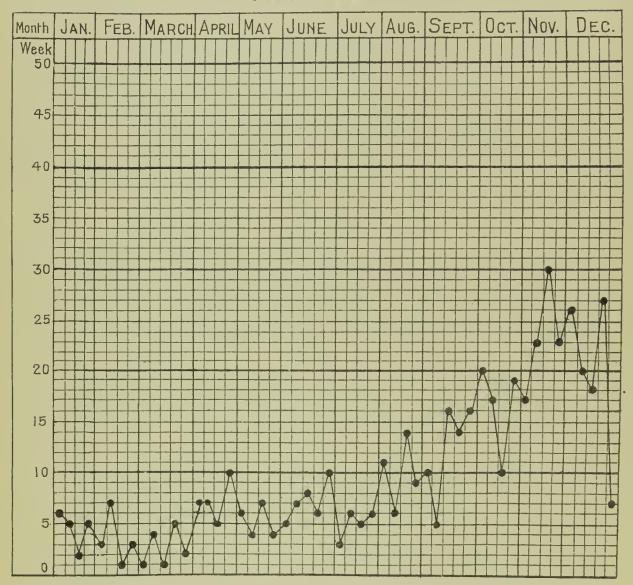
In October it was found advisable, in order to cope with the increasing number of patients from Bootle and from the adjoining district, to re-open the Smallpox block for the accommodation of Scarlet Fever cases. This building had not been used for Smallpox patients since 1903. It was, of course, thoroughly cleansed and disinfected before being used for Scarlet Fever.

This table gives the total notified cases of Scarlet Fever from August 1st to December 31st, 1908, and the ages of the persons affected.

Total at all Ages, 342.

The chart shows the number of cases notified weekly from January 1st to December 31st, 1908.

CHART SHEWING THE NUMBER OF SOARLATINA CASES REPORTED EACH WEEK FROM JANUARY 1st, 1908, TO DECEMBER 31st, 1908.



It will be noted that from the second week in August onwards a general increase occurred, culminating in the week ending November 14th, when 30 notifications were received.

The summer vacation of the various schools in the Borough lasted from July 3rd to August 10th; allowing 3 days for the incubation period of Scarlatina, it is of interest to note that from July 6th to August 13th (5 weeks)

41 notifications were received, but it must be remembered that during the holidays many of the children would be out of the district, and that the notifications might have been more numerous but for this circumstance.

In the 5 weeks preceding July 6th, 36 cases were reported, and in the 5 weeks succeeding August 13th, 51 notifications were received.

Many contradictory opinions are held as to the influence of attendance of children at elementary schools on the incidence of Scarlet Fever. In order to elucidate the point as far as this outbreak is concerned, the following table has been prepared.

Number of Scarlatina Cases reported from August 1st until December 31st, 1908, amongst Children attending School, together with the average number of Children on the rolls of each School.

School			Average No. of Children on rolls	Nui Aug.	mber of C	ases rep	orted dui Nov.	ring Dec.	Total Cases
Bedford Road	• •		1,352	4	5	2	4	3	18
Hawthorne Road			1,053	2	1	3	7	5	18
Gray Street			1,126	2	9	10	9	5	35
Linaere Lane			1,168	3	4	7	2	7	23
Salisbury Road			1,501	4	5	7	15	5	36
St. John's			951	2	3	4	_	1	10
St. James'	• •		1,545	7	5	3	4	2	21
St. Winefride's			910	_	4	1	1	2	8
Christ Church			874	2	2	6	18	5	33
St. Mary's			896		1	3	1	_	5
Day Industrial			165	_	~	_	1		1
Secondary School	0 0		9	_	***************************************		_	i	1
Four small Private	Schoo	ls	?	2		1	4	1	8
Three Liverpool Se	hools		?	1	_	_	3	_	4
One Litherland Sel	100l		?		_	1	_	_	1
			11,541						222

217 Persons previous to illness attended schools in Bootle.

5 ,, , outside Bootle.

120 ,, did not attend a school.

Total 342 ,,

In 62 of these 120 cases school children lived in the house but were not the first attacked, ,, 44 ,, 120 ., ,, ,, and were the first to become ill. ,, 14 ,, 120 ,, no other children lived in the house.

On the 27th November, 1908, the Infants' and the Girls' Departments of Christ Church Schools were closed until after the Christmas Holidays owing to the increasing incidence of Scarlatina amongst the scholars. The cases were practically confined to the Departments mentioned.

RETURN CASES.

During the ontbreak, on 13 occasions a further case or cases arose at home within three weeks of a patient being discharged from hospital as cured. This is equal to nearly 6 per cent. of the total cases discharged from the hospital, and is an unusually large percentage.

The Resident Medical Officer of the Linacre Infections Diseases Hospital assures me that, in each of the cases presumably connected with a return case, the patient left the hospital in a normal state of health, the skin having finished peeling and the patient being free from Rhinorrhoea and Otorrhoea.

Table shewing the number of Houses in which the Scarlatina Cases arose, the Number of Cases sent to Hospital, and the Number Nursed at Home, from August 1st to December 31st, 1908.

Total num	ber of hou	No. of houses	Totals						
1	member o	of family a	attacked	 205	 101		104		205
2	members	,,	, ,	 41	 38		44		82
3	,,	,,	,,	 14	 16		26		42
4	, ,	,,	2.2	 2	 1		7		8
5	, ,	* 3	, ,	 1	 1	• • •	4		5
				263	 157	•••	185	•••	342

Percentage of removals to notified cases during the above period=54.

From this table it appears that in each of 58 houses more than one case of Scarlatina was reported. Multiple cases therefore occurred in 21 per cent. of the infected houses.

In order to arrive at some conclusion as to the comparative effects of Home v. Hospital Isolation on the number of multiple cases, the following statement is of interest:—

The total number of cases occurring in the before-mentioned 58 houses numbered 137. If, for the time being, it be assumed that in each of these

premises all the cases except the first one notified could have been prevented, then 79 remain to be accounted for.

Of these 79 --

- 13 were return cases from hospital.
- 27 were reported simultaneously with the original infecting case.
- 33 were further cases reported at houses from which the primary cases had been removed to hospital.
- 6 were further cases reported at houses where the primary cases were nursed at home.

With reference to the 33 cases mentioned in the above list, where the primary cases were removed to hospital, it may be noted that the time elapsing between the notification of the primary cases and the notification of further cases was as follows:—

In	2	cases	1	day	In 1 case 1	7 days
, ,	3	,,	2	days	,, 1 ,, 1	9 ,,
,,	1	case	3	, ,	,, 1 ,, 2	1 ,,
, ,	6	cases	4	, ,	,, 1 ,, 2	2 ,,
2.2	2	, ,	5	2.2	., 1 ,, 2	3 ,,
, ,	1	case	6	, ,	,, 1 ,, 2	4 ,,
,,	5	cases	7	, ,	,, 1 ,, 2	9 ,,
2.2	1	case	12	, ,	,, 1 ,, 3	3 ,,
2.2	1	2.2	14	, ,	,, 1 ,, 3	4 ,,
,,	2	cases	16	2.3	qqaq	
					Total 33 cases	
					-	

The tables given appear at first sight to show that multiple cases were least prevalent when Scarlatina patients were nursed at home.

This is an obvious fallacy.

In order to arrive at correct conclusions, the number of children who had not previously suffered from Scarlet Fever, and who were therefore liable to contract the disease, must be taken into account.

In the houses from which the 185 hospital cases came there were 316 other children who had not had Scarlet Fever, and in the 157 cases nursed at home there were only 106 other children liable to contract the disease.

Much care was exercised in deciding whether a case should be removed to hospital or be nursed at home, and the good results following home isolation were probably brought about in consequence of the supervision exercised by the staff of the Health Department, and by the parents of the patients carrying out the instructions given them by those officers, and by the medical practitioners of the Borough.

During this outbreak the type of the disease was mild in character, and consequently many cases probably escaped notification.

My predecessor in his last Annual Report says that "There can be no doubt that one of the reasons why Isolation Hospitals have not been as successful in stamping out infections disease as was prophesied when the system of isolating cases in Hospital came into vogue, is the fact that when the type of the disease is mild a large number of cases escape observation, while others, even if they are observed by the parents, are not medically treated, because the patients are never sufficiently ill in the parents' opinion to necessitate the calling in of the doctor, with the result that these cases are never isolated, but play about as usual, and convey the disease to others. have again to remark that very often an absolute lack of that ordinary care which common sense would suggest in the matter of isolating patients from the other inmates of the house before removal to hospital can be effected, is shown by the parents, who do not carry out the instructions in that direction, which are, I presume, given by the doctor when he sees the patient. It is a common occurrence for the Inspector when he goes to remove to hospital a child suffering from Scarlet Fever, to find that child playing with or in the same bed as other children not so suffering. This negligence costs the ratepayers a large sum of money in the year, and the parents themselves not a little anxiety."

DIPHTHERIA.

In 1908 the number of cases notified was 68, of which number, 14 died.

The cases occurred in the Wards as under:-

Derby	Stanley	Mersey	K	nowsley	Linaere	Orrell
16	 14	 11		5	 17	 5

It will be noted that the greatest number arose in Derby and in Linacre Wards; the portions of the Borough where Scarlatina was also most prevalent.

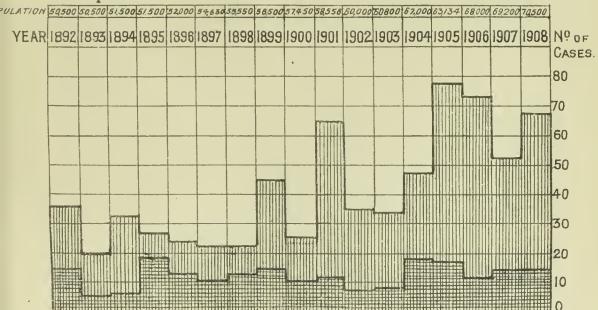
The following table shows the number of Diphtheria cases, the number of deaths, and the percentage of deaths to cases during the last 13 years :-

	1596	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Number of cases noti-	09	21	21	45	24	64	34	33	48	78	m.4	#O	co
fied, including Croup	23	21	21	40	24	04	94	99	40	10	74	52	68
Number of deaths, including Croup	12	11	12	14	10	11	8	9	19	18	11	14	14
Number of cases admitted to Hospital	8	ភ័	4	12	9	45	25	20	36	48	42	40	29
Number of deaths in Hospital	3	1	2		4	7	2	4	12	9	7	7	6
Ткаспеотому-													
Number of cases					3	11	8	4	9	8	11	8	1
	(N	o rec	(bros										_
Number of deaths	(,			2	. —	3	3	3	4	4	
*Hospital Mortality	37%	20%	50%	0%	44%	15%	8%	20%	33%	18%	16%	17%	20%
*Outside Mortality	60%	62%	58%	42%	40%	21%	66%	37%	58%	30%	12%	58%	20%
* NOTE -The number	re don!	t with	h ara	20 21119	11 +b 64	t than	narcan	tores	nee of	VARV	little :	ralna	

Three of the cases sent to hospital as Diphtheria were found not to be so suffering.

DIPHTHERIA.

Diagram shewing the number of Notifications received each year since 1892. The darker shading corresponds to the number of deaths during the same period.



In years past it was usual to ascribe the origin of all cases of Diphtheria to emanations from defective drains. Examinations of the drainage at the residences of the patients by no means support this conclusion. It is beyond doubt, however, that sewer gas may in some persons produce an inflamed throat, and thus lead to conditions predisposing to Diphtheria, but before the disease can develop, the Diphtheria bacillus must be present. It is worthy of note that since the water-carriage system became general in Bootle, the number of Diphtheria cases notified has increased greatly, but the total number of deaths per year from the disease has practically remained the same, thus showing that the case mortality is now very much less than formerly.

This lessened case mortality has been ascribed to two chief factors, the first being a more general use of Antitoxin, especially at the commencement of the illness, and secondly, to the type of the disease during recent years being milder in character.

Nearly all other towns have had a similar experience. There is no question that Bootle is now in an infinitely better sanitary condition than it was when the offensive privy middens were general.

The breeding grounds of Diphtheria cases must be looked for elsewhere. It is essentially a contact disease. It has become more and more impressed upon Sanitarians that the place where this contact occurs is in the infant departments of elementary schools, especially in those where slates, pencils and books are used in common. A child suffering from a mild and unsuspected form of Diphtheria may use these articles and contaminate them. Probably on the next distribution of slates, &c., a previously healthy child will obtain possession of the infected articles, and thus acquire the disease.

So well is this method of infection now known, that it is becoming the practice to abolish slates and pencils from infant departments. The books, however, cannot be dispensed with, hence the need of the greatest care in ensuring that any particular book is only used by one child, and that the books be not piled in heaps at the termination of school hours.

The practical difficulties connected with the carrying out of the latter plan are no doubt very great, but possibly in the future some satisfactory method of dealing with the matter will be evolved.

ENTERIC FEVER.

During the year only 30 cases were notified, and of these 15 were removed to hospital. Of the latter, 9 were afterwards found not to have suffered from Enteric Fever.

The 30 notified cases were distributed among the wards as follows:—

Derby Stanley Mersey Knowsley Linacre Orrell 4 ... 1 ... 2 ... 7 ... 10 ... 6

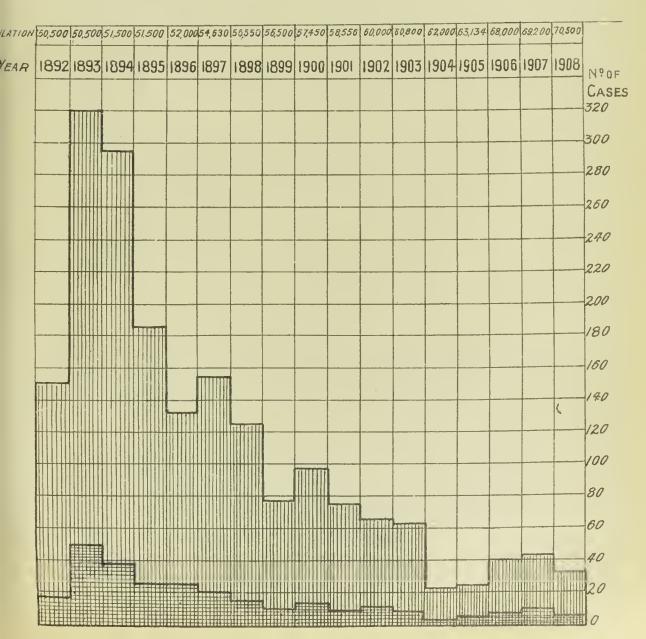
In no town has a greater success followed the conversion of privies into water-closets than in Bootle. The Corporation paid half the expense of the conversions, and in this way expended about £4,481.

The money was certainly well spent, and the results have been of incalculable benefit to the Borough. In order to better illustrate the conditions that prevailed 17 years ago with those of to-day, the diagram relating to Enteric Fever has been prepared.

ENTERIC FEVER.

Diagram shewing the number of Notifications received each year since 1892.

The darker shading corresponds to the number of deaths during the same period.



This shows that in 1893, 320 cases were notified, and that 53 deaths occurred from the disease. That year the conversion of privies into water-closets was pushed forward with the greatest vigour, and continued until a great number of the middens were demolished, with the result that from 1896 onwards the disease gradually diminished. During the past 5 years an average of 31 cases each year has been notified, contrasting greatly with the 320 cases reported in 1893.

I am equally convinced that if the housing question could be dealt with in a similarly drastic manner, and the pernicious habit of sub-letting stopped, a still greater measure of sanitary reform would be achieved.

TYPHUS FEVER.

One case of Typhus occurred during the past year.

The patient was sent by his medical attendant to Mill Road Hospital, where the disease developed. The case was then transferred to Netherfield Road Infectious Diseases Hospital, and died in that Institution.

MEASLES.

During the year 1908 the deaths of 34 children were due to Measles, as against 16 in 1907, and 44 in 1906.

As predicted in the last Annual Report, Measles became prevalent at the beginning of the year. Not being a notifiable disease, it is impossible to state with accuracy the number of children affected. The Education Authorities, however, forwarded to the Health Department the names of 320 children said to be absent from School owing to Measles.

Table showing certain statistics with regard to Measles for the past 17 years:—

						Λg	es at	Death.		
Year	To	otal Dea	ths	Under 1		1 to 5		5 to 15	15 to 25	25 to 65
1892		7		_	•••	7	• • •		١	
1893		24		_	• • •	21		3		
1894		15				14		1		
1895		2		_		1		1		der one year were entiated from the
1896		28				26	* 1 *	2	1	until 1900.
1897	• • •	14				14	• • •			1000.
1898		7		—	* * 1	7	* * *			
1899		6				6		- 4	1.	
1900	• • •	21		8		11		2		
1901		5		1		3		1		
1902		46		9		35		2		
1903		2		1	•••	1		_		
1904		48		9		39		_		
1905		9		2		7	• • •			
1906		44	• • •	2		37	110	5*		
1907	•	16		4		12		_		
1908	•••	34		4		30				

^{*} All these children were just over five years of age.

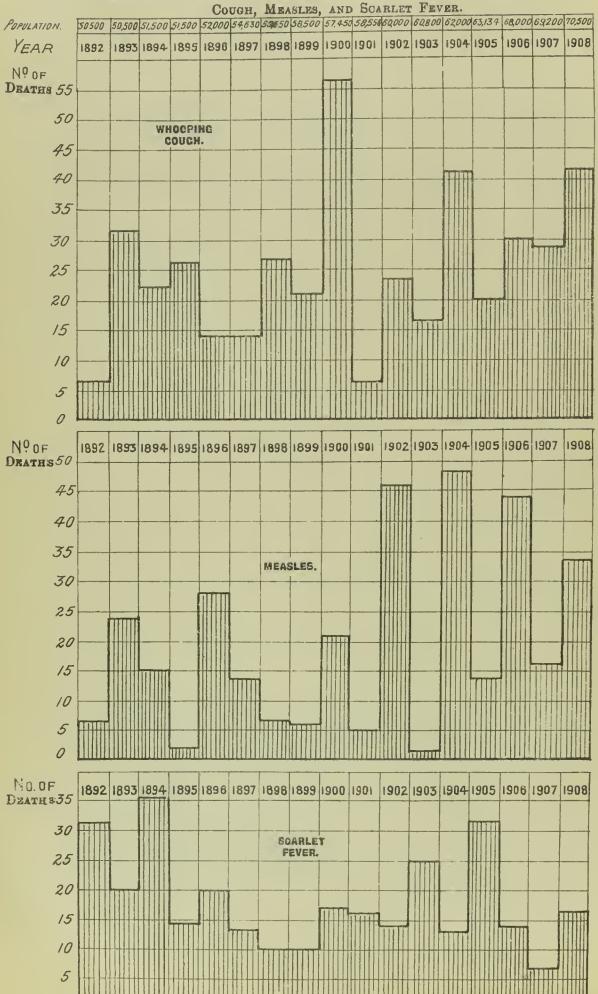
Table showing mortality from Measles per 1,000 persons living at the undermentioned age groups:—

Below 1	1 to 5	5 to 15	15 to 25	25 to 65	over 65
2:0	 4.4	 _	—	—	—

Every case of Measles notified by the School Authorities is visited by an Inspector, who gives advice as to isolation and nursing, and leaves a copy of a leaflet containing information concerning the disease.

Measles became epidemic in the infants' departments of Gray Street, St. John's and Linacre Schools. In each case these departments were closed for a few weeks in consequence thereof. The advisability or otherwise of closing schools as a routine measure during epidemics of Measles is dealt with in the School Medical Officer's Report.

DEATHS IN BOOTLE DURING SEVENTEUN YEARS (1892-1908) FROM WHOOPING



WHOOPING COUGH.

Whooping Cough caused 42 deaths during the year 1908. This is equal to a rate of ·6 per 1,000 of the total population. In 1907 the mortality from Whooping Cough was ·4 per 1,000.

Number of Deaths from Whooping Cough each year since 1892.

 $1892\ 1893\ 1894\ 1895\ 1896\ 1897\ 1898\ 1899\ 1900\ 1901\ 1902\ 1903\ 1904\ 1905\ 1906\ 1907\ 1908$ Deaths $6\dots32\dots22\dots22\dots26\dots14\dots14\dots27\dots21\dots56\dots6\dots23\dots16\dots41\dots20\dots30\dots28\dots42$

Number of deaths from Whooping Cough and the death rates at the following age groups:—

	Ag	e under 1	t	1 to 5	5 to 15	15 to 25	25 to 65
Deaths		16	• • •	24	 1	 _	 1
Rate per 1,000		8.2		3.5	 _	 	 _

202 Cases of the disease were reported to the Health Department by the School Authorities.

As in the case of Measles, an Inspector visits each notified case, and gives instruction as regards isolation, &c. The parents are also recommended to call in the aid of a medical man, and in many cases this advice is acted upon.

The diagrams on page 36 are interesting. They show the differences each year in the number of deaths from Whooping Cough, Measles and Scarlet Fever. They demonstrate also that, notwithstanding the progress made in sanitation generally, the deaths from these diseases have shown no permanent decline since 1892.

Cases of Infectious Disease notified by the Elementary Education Authority to the Medical Officer of Health.

1908.

School.	Measles.	Chieken Pox	Whooping Cough.	Other Diseases.	Totals.
Salisbury Road	16	19	_	29	64
Hawthorne Road.	5		13	williant to	18
Linacre Lane	56	4		1	61
Bedford Road	28	5	6	14	53
Gray Street	87	6	*	8	101
St. James'	18	10	95	57	180
St. Mary's	24	undiselected	35	34	93
Christ Church	8	_	4	7	19
St. John's	64	4	13	21	102
St. Alexander's	8	7	12	36	63
St. Winefride's	6	9	24	33	72
Totals	320	64	202	240	826

CASES VISITED,

	Total	No. of V	isits	No. of children found not suffering as reported			
Measles		371				56	
Chieken Pox		85			• • •	10	
Whooping Cou	gh	249			•••	39	
Other Diseases		573		•••		42	
Totals	•••	1,278	* * *	•••	. • •	147	

The total number of visits in 1907 was 1,114.

7.1	11	11	1906	9 1	1,251
11	11	11	1905		450

DIARRHŒA.

During 1908, 53 deaths were registered under the heading of Diarrhæa.

With the exception of the year 1907, when 40 deaths occurred, the number of deaths from Diarrhea in 1908 is the lowest ever recorded.

The following tal	le shows	the	mortality	each	year	from	this	zymotic
disease since 1898 :								

Year	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
No. of deaths	114 .	146	139	113	56	85	109	. 87	. 83	40	53
Rate per 1,000 births	64.3.	. 80.7	.76.0	61.5	.27:1	.42.2.	56.7	41.8.	.38·2	18	24
Rate per 1,000 of the population	2.0.	2.5	2.4	1.9	8	1.3.	1.7	1.3	. 1.2	·5	.7

The following is a list of the Streets and Wards in which the deaths took place:—

DERBY WARD.	STANLEY WARD.	MERSEY WARD.
Brookhill Road 1	Beatrice Street 1	Alma Vale Terrace. 1
Cedar Street 2	Benedict Street 1	Bedford Place 1
Cornwall Street 1	Clare Road 1	Berry Street 2
Devon Street 1	Hawthorne Road 1	Brasenose Road 2
Garden Lane 1	Olivia Street 1	Church Street 1
	Wadham Road 1	Derby Road 1
6	Wattham Houte I	Emley Street 1
O	6	Howe Street 1
	O	
	_	Irlam Road 1
		Lyons Street 1
		Raleigh Street 1
		St. John's Road 1
		_
		14
KNOWSLEY WARD.	LINACRE WARD.	ORRELL WARD.
		ORRELL WARD.
Bank Road 1	Boswell Street 1	ORRELL WARD. Edith Road 1
Bank Road 1 Boreland Street 2	Boswell Street 1 Dryden Street 1	ORRELL WARD. Edith Road 1 Eleanor Road 1
Bank Road 1 Boreland Street 2 Boston Street 1	Boswell Street 1 Dryden Street 1 Falconer Street 1	ORRELL WARD. Edith Road 1 Eleanor Road 1 Elizabeth Road 1
Bank Road 1 Boreland Street 2 Boston Street 1 Carolina Street 1	Boswell Street 1 Dryden Street 1 Falconer Street 1 Hood Street 1	ORRELL WARD. Edith Road 1 Eleanor Road 1 Elizabeth Road 1 Monfa Road 1
Bank Road 1 Boreland Street 2 Boston Street 1 Carolina Street 1 Coleridge Street 1	Boswell Street 1 Dryden Street 1 Falconer Street 1 Hood Street 1 Knowsley Road 1	ORRELL WARD. Edith Road 1 Eleanor Road 1 Elizabeth Road 1
Bank Road 1 Boreland Street 2 Boston Street 1 Carolina Street 1 Coleridge Street 1 Holywell Street 1	Boswell Street 1 Dryden Street 1 Falconer Street 1 Hood Street 1 Knowsley Road 1 Longfellow Street 1	ORRELL WARD. Edith Road 1 Eleanor Road 1 Elizabeth Road 1 Monfa Road 1 Willard Street 1
Bank Road 1 Boreland Street 2 Boston Street 1 Carolina Street 1 Coleridge Street 1 Holywell Street 1 Milton Street 1	Boswell Street 1 Dryden Street 1 Falconer Street 1 Hood Street 1 Knowsley Road 1 Longfellow Street 1 Percy Street 1	ORRELL WARD. Edith Road 1 Eleanor Road 1 Elizabeth Road 1 Monfa Road 1
Bank Road 1 Boreland Street 2 Boston Street 1 Carolina Street 1 Coleridge Street 1 Holywell Street 1 Milton Street 1 Rhyl Street 1	Boswell Street 1 Dryden Street 1 Falconer Street 1 Hood Street 1 Knowsley Road 1 Longfellow Street 1 Percy Street 1 Pope Street 1	ORRELL WARD. Edith Road 1 Eleanor Road 1 Elizabeth Road 1 Monfa Road 1 Willard Street 1
Bank Road 1 Boreland Street 2 Boston Street 1 Carolina Street 1 Coleridge Street 1 Holywell Street 1 Milton Street 1 Rhyl Street 1 Stafford Street 1	Boswell Street 1 Dryden Street 1 Falconer Street 1 Hood Street 1 Knowsley Road 1 Longfellow Street 1 Percy Street 1 Pope Street 1 Salisbury Road 1	ORRELL WARD. Edith Road 1 Eleanor Road 1 Elizabeth Road 1 Monfa Road 1 Willard Street 1
Bank Road 1 Boreland Street 2 Boston Street 1 Carolina Street 1 Coleridge Street 1 Holywell Street 1 Milton Street 1 Rhyl Street 1 Stafford Street 1 Talbot Street 1	Boswell Street 1 Dryden Street 1 Falconer Street 1 Hood Street 1 Knowsley Road 1 Longfellow Street 1 Percy Street 1 Pope Street 1	ORRELL WARD. Edith Road 1 Eleanor Road 1 Elizabeth Road 1 Monfa Road 1 Willard Street 1
Bank Road 1 Boreland Street 2 Boston Street 1 Carolina Street 1 Coleridge Street 1 Holywell Street 1 Milton Street 1 Rhyl Street 1 Stafford Street 1	Boswell Street 1 Dryden Street 1 Falconer Street 1 Hood Street 1 Knowsley Road 1 Longfellow Street 1 Percy Street 1 Pope Street 1 Salisbury Road 1	ORRELL WARD. Edith Road 1 Eleanor Road 1 Elizabeth Road 1 Monfa Road 1 Willard Street 1

FEEDING.

- 4 Cases were said to have been fed on breast milk only.
- 8 ,, had been recently weaned.
- 16 ,, were fed by hand since birth.
 - 4 ,, , partly on the breast and partly by hand.

In nearly every case where a feeding bottle was used the boat-shaped variety was found in use.

In the following instances three or more deaths had occurred previously in the same family:—

No. of Childre	11	No. dead	Fro	m Diarr	hœa.	Parents drin	k?	Feeding
7		5		3		No		Neave's Food
4		4		8		No		Cow's milk
8		5		4	• • •	No		• 1
6		5	• • •	3		No		Lately weaned
6		3		3		?		1,

During the months of July, August and September in 1907, and of August and September in 1908, the Health Committee inaugurated a system of voluntary notification of cases of Diarrhæa occurring in children under the age of one year.

For the notification of each case the medical attendant was offered 2/6, and requested to only report those in which he was of opinion that the services of a Lady Health Visitor would be both useful and welcome.

This resulted in 46 notifications being received in the year 1907, and 41 in 1908.

In the latter year, 29 of the patients were reported by two doctors, the remaining 12 cases coming from 6 other medical men. 13 of the cases occurred in the Derby Road district

Of those notified 6 died, 2 had been delicate from birth and 3 others were moribund when reported. In these latter cases no useful result could at this late stage of the illness follow notification of the disease. Moreover, the notifications did not comply with the conditions laid down by the Health Committee.

The remaining 35 cases, i.e, 85% of the total, all recovered.

I think the experiment is worth repeating, but it should be clearly understood that notification is only invited where there is a possibility of the child receiving benefit.

Last year over seven pages of the Annual Report were devoted to the subject of Epidemic Diarrhea. As the conditions since then have not materially changed, reference is invited to that Report for further general information on the subject.

PHTHISIS.

During the year 1908, 104 deaths were ascribed to Phthisis, equal to a rate of 1.4 per 1,000 of the total population.

The details of the disinfection carried out in connection with Phthisis are as follows:—

Number of	cases notified, ar	nd taken	from	death	returns	 118
,,	honses disinfecte	ed			• • •	 53
11	houses disinfecte	d and c	leanse	d		 38

The following table gives the Ward distribution of Phthisis, the total deaths each year, and the death rate per 1,000 since 1901:—

Year		Derby	Stanley	Mersey	Knowsley	Linacre	Orrell	Totals	of the population	
1901		11	11	31	18	7		78	1.3	
1902	2	11	12	35	25	16		99	1.6	
1908	3	9	12	22	18	15		76	$1\cdot 2$	
1904	ł	15	12	31	31	11	_	100	1.6	
1905	<u></u>	12	8	27	15	16		78	1.2	
1906	3	6	9	27	17	21	*6	86	1.2	
1907	7	14	11	13	11	30	3	82	1.1	
1908	3	13	12	34	16	26	3	104	1.4	

^{*} Previous to 1906 the statistics for Orrell were not included.

Table showing progressive decline in the death rate from Phthisis in the whole of England during the last four decades:—

1.1.41	1866 to 1875	1876 to 1885	1886 to 1895	1896 to 1905
Average annual death-rate per				
1,000 of the population				
from Phthisis	2.32	 1.93	 1.54	 1.26

In 1908, 34 per cent. of the deaths from Phthisis occurred in the Workhouse Hospitals of the West Derby Union.

Since 1901 a voluntary system of notification of cases of Phthisis has been in force in Bootle, the Corporation paying a fee of 2/6 for each case reported.

Systematic enquiries are made into all cases coming to the knowledge of the Health Department. Besides giving instructions as to the best methods of combating this disease, an offer is made to disinfect the infected rooms, etc., free of charge, and, if the consent of the owner can be obtained, the Corporation at their own expense strip the old paper from the walls of these rooms. A pocket spittoon is also presented to those patients found to require one, and instructions given as to how to use and cleanse this article. Frequent re-visits are made to the cases in order to give any further advice or assistance that may be necessary.

The following table gives the number of cases reported under this scheme each year from 1901.

Year		Cases		Remarks
1901		22	• • •	From July to end of year.
1902		22	• • •	
1903	• • •	21		
1904		40		
1905		22		_
1906		18		_
1907		7		_
1908		24		

The average annual number of cases notified during the past 8 years = 22.

These figures clearly show that in Bootle the voluntary notification of Phthisis has been a failure.

It is an indispensable preliminary to effective and complete preventive measures that accurate information of cases of the disease should be in the possession of the Health Committee.

The opposition to compulsory notification of Phthisis is now much weaker than it was 8 years ago. Already the system is in operation in

Sheffield, Burnley and Bolton, and the results in these towns will be keenly watched by other Local Authorities.

In the meantime the Local Government Board have decided that from 1st January, 1909, all cases of Phthisis occurring in Poor Law practice in England and Wales shall be reported to the Urban Sanitary Authority concerned, and probably, by this means alone, about 33% of the total cases in Bootle will be notified to the Health Department.

The cases notified will give an opportunity to educate and train the patients in the method of life suitable to the disease, to disinfect rooms which have become infected, and to remove all conditions which favour infection and re-infection.

According to the Medical Officer of the Local Government Board, "tuberculosis is not only a preventable disease, but it can also be arrested, especially in its earlier stages; and indeed the vast majority of those attacked by it recover."

"Under the present conditions a large proportion of the total cases of pulmonary tuberculosis remain unrecognised until either consolidation or cavitation of lungs has occurred, and patients are approaching or have reached the period of complete disablement from work. In such cases there must already have been many opportunities for spreading infection."

In order to emphasise the verbal instructions, leaflets containing the following information are supplied to each patient.

How to Prevent Consumption.

PRECAUTIONS.— It is essential for the protection of their own families, and to prevent the spread of the disease among the general public, that the following simple precautions be taken by consumptive persons:—

The consumptive person must not expectorate about the house, nor on the floor of any cab, omnibus, tram car, railway carriage, or other conveyance. Spitting about the streets, or in any public buildings (churches, schools, theatres, railway stations, &c.), is a dangerous as well as a filthy habit.

The consumptive person must not expectorate anywhere except into a spittoon kept for the purpose, and containing a little water, but when out of

doors, a small, wide mouthed bottle with a well-fitting cork, or a pocket spitton, which may be obtained from any chemist, should be used.

The expectoration must be washed into a drain or buried in the earth.

The cup or spittoon must then be kept in boiling water for ten minutes before being thoroughly cleaned.

When not provided with a proper spittoon, a consumptive person must not spit into a handkerchief, but into a piece of rag or paper, which must be burnt.

Handkerchiefs which may have been used of necessity, should be boiled half-an-hour before washing.

Consumptive persons must not swallow their phlegm, as, by so doing, the disease may be conveyed to parts of the body not already affected.

A consumptive person must not kiss, or be kissed on the mouth.

A consumptive person, when coughing, should always hold a hand-kerchief in front of his mouth, and avoid coughing in the direction of another person.

General Precautions to be Observed.—ALL rooms occupied by consumptive persons should be as well lighted and ventilated as possible. Fresh air, light and sunshine, are most important preventives of consumption. It is not safe for a healthy person to share a bedroom with a consumptive.

No chimney should ever be blocked up, and windows should be kept open.

Cleanliness and good sanitary surroundings are important, both for the prevention and for the cure of consumption.

Moist dusters must be used to wipe up the dust on the floor, furniture, woodwork, &c., and must afterwards be boiled. Tea leaves used on the floor should afterwards be burnt. Do not chase dust about or stir it up.

Milk, especially that used for children and invalids, should be boiled or sterilised. Meat should be well cooked.

A room which has been occupied by a consumptive should not be used again until it has been thoroughly disinfected and cleansed.

FRESH AIR AND VENTILATION.

Fresh air is most important for the preservation of health. This applies to children as much as to adults.

Want of proper ventilation predisposes to various forms of disease, especially to Consumption and other forms of tuberculosis, by bringing about a low state of health.

In order to prevent the development and the spread of Consumption, fresh air and proper ventilation are essential in factories, workshops and offices, particularly where the work carried on is associated with gaseous fumes or fine dust.

The better the ventilation, the greater the worker's power.

The BREATH from the lungs contains foul organic matter which is highly poisonous.

The air containing this foul organic matter must be quickly removed from living and sleeping rooms, and also from workrooms, schools, churches, places of entertainment, public vehicles, &c.

If not removed by efficient ventilation, the foul air is breathed again and again, and so poisons the blood.

This is a common cause of headache, nausea, loss of appetite, lassitude, anæmia, poorness of blood, and chronic ill-health, predisposing to Consumption and other diseases.

OVER-CROWDING is dangerous and injurious to health wherever it occurs, and should therefore be avoided.

When a room, on entering it directly from the open air, smells close and stuffy, the foul air it contains is not fit to breathe, and more fresh air is required.

WINDOWS should be made to open to the external air, and should be kept open day and night, unless this is forbidden by the medical adviser.

A free supply of fresh air is secured by widely opening the window at the top, or by opening the bottom sash about four inches, and inserting between the window frame and the sill a piece of wood the whole width of the window, so that the air enters, in the former case, at the top of the room, in the latter case, between the sashes at the middle of the window, and in an upward direction.

Fresh air and sunlight kill disease germs. Every room in which there has been a case of infectious disease must be especially well ventilated.

Every room, especially if used for sleeping in, should have an open fireplace.

ALCOHOLISM.

During the year 1908, 9 deaths were assigned to Alcoholism, compared with 6 in 1907, and 7 in 1906.

This small number does not in any way indicate the full extent of the injury to health caused by excessive drinking.

THE MIDWIVES ACT.

The number of women on the local roll of midwives is 18. In addition to these, 7 others who reside outside the district gave notice of their intention to practice within the Borough.

Of the local midwives, three have not passed any qualifying examination, but each of these has been recognised by the Central Midwives Board, in consequence of having been in practice as a midwife for at least one year previous to July 31st, 1902.

In compliance with Section 8 of the Act, the Central Authority has been supplied with the following information:—

Change of name	1
Change of address	3
Notice of intention to cease practic	e 1
Deaths of midwives	

Under the rules of the Central Midwives Board (Section 18 E.) the following notifications have been received:—

Records of sending	for medica	l help				60
Still births	1 + 1					40
*Deaths of children	before atter	idance o	f a medica	l pract	itioner	3
†Deaths of mothers	,	2	, ,		; ;	2
Cases of puerperal	fever notific	ed by mi	dwives			
Cases of infectious	disease .	9	2.2			1

^{*} These cases were enquired into by the Medical Officer of Health.

Of the 18 midwives, 13 devote their whole time to the work. The others are only partially employed.

The following particulars relate to the period of pregnancy during which the still births took place:—

At 6 months	. • 1			10 0	eases.
,, 7 ,,		• • •		10	1 1
,, 8 ,.	• • •	•••	•••	3	,,
,, 9 ,,	• • •	• • •	• • •	14	2.2
Not specified	* * *			3	, 1
	Total still	births		40	

In three cases of still births the mothers were unmarried women.

In reference to the 60 records of sending for medical help, it may be noted that this number gives a percentage of 3.9 to the total confinements. In connection with this matter it is worthy of note that a midwife who called in a doctor to 12.6 per cent. of her cases (the highest recorded for the year) had the least fatality in her practice, whereas, those midwives who seldom called in medical aid had the greatest fatality amongst their patients.

[†] These cases were enquired into by the Coroner.

During the year under review the West Derby Board of Guardians decided that where a lying-in woman was unable to pay for medical aid, and the attending midwife considered that such aid was required, the Board's District Medical Officer should be called in, but if the matter was urgent and the Poor Law Medical Officer could not be obtained at once, then the nearest private practitioner should be sent for at the expense of the Guardians.

All the midwives in the Borough were notified of this very humane provision, but in two instances only was it acted upon.

The following is a list of the complications for which medical assistance was required:—

Abnormal Presentations—			
Brow or face presentation	1 * *	• • •	1
Occipito-posterior		• • •	2
Breech	• • •	• • •	5
Foot		• • •	2
Cord		•••	1
Placenta praevia	• • •	•••	2
Other complications—			
Deformed pelvis		• • •	6
Ante-partum hæmorrhage			2
Retained placenta or membranes		• • •	2
Ruptured perineum		• • •	7
Inversion of uterus			2
Malformation of child			1
Eclampsia			1
Obstructed labour			5
Uterine inertia	• • •		7
Requiring instrumental assistance		• • •	9
Various or not specified		• • •	5
		Total	60

PUERPERAL FEVER.

During the year 8 cases were notified, and of these 5 died, giving a mortality from this disease of 2.2 per 1,000 births.

The death rate from Puerperal Fever for the whole of England and Wales during the same period was 1.5 per 1,000, and for the previous 10 years 2.0 per 1,000.

The number of days elapsing between the confinement and the notification of Puerperal Fever was as follows:—

In 3 cases	. • •	• • •	6 days.
,, 2 ,,		=	7 ,,
,, 1 case	* * *	• • •	10 ,,
,, 1 ,,		* * *	19 ,,
,, 1 ,,		10.	20 ,,

It would assist the Health Department very much if, in future, all cases were reported as soon as diagnosed.

Three of the patients were sent to Mill Road Infirmary and of these one died.

Five of the patients were attended solely by a midwife, until the symptoms of the disease developed, when a doctor was called in. In the remaining three cases a medical man had been in attendance since the confinement.

With one or two exceptions the midwives have, during the year, carried out their duties efficiently.

The case books have been well kept, the bags and appliances were found in a cleanly state, and the reports of the routine visits paid to the homes of the midwives shew that their houses are, as a rule, kept in a scrupulously clean condition.

In only two instances, as far as is known, was there any serious delay in sending for medical aid, and in both of these the person in attendance was an uncertified woman. In one of the cases breast milk was recommended by the "handy" woman to be squirted into an infant's eye in order to cure inflammation of that organ. The patient was afterwards treated at the local hospital but death ensued, no doubt accelerated by the treatment received outside. The other also was a case of ophthalmia neonatorum, but arrangements were made for the patient to be removed to St. Paul's Eye Hospital, where recovery took place.

There are known to be six such "handy" women practicing midwifery, to a more or less extent, in Bootle. Fortunately, after the 1st of January, 1910, these women will be prohibited from attending cases.

SLAUGHTER HOUSES.

Two only are in constant use, and these are properly kept. Nearly all the meat consumed in Bootle comes from the Liverpool or the Birkenhead public slaughter houses, or is imported in a frozen condition from abroad.

FOOD INSPECTION.

684 Inspections of premises were made in which food was either prepared or sold. The amount of diseased or unsound food destroyed during the year amounted to 1,722 lbs. In all cases the condemned food was voluntarily given np. Usually the Inspector was called upon to examine the food at the request of the owner. In no instance was it considered advisable to issue a summons.

Under the Public Health (Regulations as to Food) Act, 1907, the Local Government Board have already issued two sets of regulations relating to imported foods and the duties of Customs Officers and Port Sanitary Authorities in relation thereto.

Definite regulations, governing the sanitary condition of buildings in which food is prepared, are wanting.

These regulations should include premises where potted or tinned meats, sausages, pies, fruit, etc., are prepared and stored, and in addition to prescribing rules relating to the conducting of the business, should particularly refer to the condition of the walls and floors, and to the manner in which such premises should be lighted, drained, ventilated and cleansed.

If regulations such as those suggested were made, uniformity of action by all Sanitary Authorities would be ensured and thus lead to a much needed improvement in the structure and the arrangement of such premises.

OFFENSIVE TRADES.

Only four such trades at present exist in the Borough, viz.:—

	Number of	f Inspection
2 Tanneries	 	24
1 Soap Boiler	 	10
1 Gut Scraper	 	48

In no case was a unisance reported at the above premises during the year.

SUB-LET HOUSES.

There are 176 sub-let houses on the register. Although the number actually registered is comparatively small, the number of houses kept under observation is over 600, and to these 2,517 visits were made in 1908.

The inhabitants are very migratory, and it is difficult to keep the register correctly. Many of the tenants only stay in a house long enough to permit of the cards and tickets being affixed, and, very often, when the house is again visited in two or three weeks, it is found to be empty.

One serious defect in our present bye-laws is that no proceedings can be taken under them in cases where it is necessary, from a moral point of view, to separate the sexes. This matter is quite as important as overcrowding.

Probably less than 10 per cent. of the sub-let houses in Bootle are registered as such. In order to register and to properly inspect them all, two additional Inspectors would be required for this work alone. I do not, however, think it necessary that all these should be registered, as in many sub-let houses there are only 5 or 6 persons in each.

During the year 374 notices have been served upon the occupiers in respect of registration, overcrowding, dirty rooms, etc. In only one case was it found necessary to issue a summons.

HOUSING OF THE WORKING CLASSES ACT.

During the year 1908 no action was taken under Parts I or II of this Act.

Early in the year, however, the Health Committee requested the Medical Officer of Health to report on "The necessity of working-class lodging-houses in Bootle in lieu of artizans' dwellings, and generally on the question."

The report submitted showed that there already existed five common lodging-houses in the Borough, giving, in the aggregate, accommodation for 341 men, and that these premises were registered to accommodate nearly 20 per cent. more persons than used them.

For the purposes of that portion of the report dealing with artizans' dwellings, practically all the cottage property in the district of Derby Road was visited.

In all, 685 houses were examined, and 37.9 per cent. of these were found to be let in lodgings or occupied by members of more than one family.

Overcrowding, however, from a legal point of view, was found to be practically non-existent.

The following table is a summary of some of the information contained in the report:—

In the report							Azionomo
Street	To hou				Average rent of house	Rents paid by sub-tenants vary from	Average No. of persons in each sub- let room
Mann Street .	3	4 1	9	5	5/9	1/- to 3/6	1.7
Second Street .		6 —	3	6	5/-	1/6 ,, 2/6	3
Howe Street .	3	6 —	20	8	7/9	2/- ,, 4/-	1.7
Miller's Bridge .	2	9 —	5	2	4/-	2/-	3
Wm. Henry Stree	et 2	3 —	9	6	5/6	2/- ,, 2/9	1.6
First Street .		6 —	_	5	5/-		
Kirk Street .	6	7 6	30	6	6/6	1/- ,, 3/6	$2 \cdot 9$
Balliol Terrace .	1	5 1	12	5	6/-	1/- ,, 3/-	2.5
Matthew Street.	3	0 —	20	5	5/9	1/- ,, 3/-	$2 \cdot 2$
Molyneux Street.	3	6 —	28	5	6/-	9d. ,, 3/-	2.8
Johnstone Street.	3	5 1	18	5	6/-	1/6 ,, 3/-	2
Lincoln Street .	3	6 —	11	4	5/6	1/6 ,, 3/-	3
Emley Street .	3	8 1		4	5/-		
Lyons Street .	6	4 8	28	4	5/-	1/- ,, 2/6	$2 \cdot 4$
Raleigh Street .	1	0 —	10	6	6/6	1/- ,, 3/3	$2 \cdot 4$
Pleasant View	. 1	6 —	3	3 to 6	3/9 to 7/8	3 1/- ,, 3/-	1.5
Cross Street (No. 2	2)	5 —	1	ditto	4/6 to 6/6	3 1/-	1
Henry Street .	. 1	2 1	_	4	5/-		
Cross Terrace		1 —	1	3 to 8	5 4/- to 5/8	3 - 4/6	1
Cross View .		2 2					
Canal View .		5 —		4	4/-		
Cross Place .		3 1		4	4/- to 4/6	3	
		8 —	—	4 to ($\frac{3}{4/8}$ to $\frac{5}{9}$)	
Everton View .	• •	4 —	3	6	6/-	3/-	1.3
Lees Terrace .	• •	4 —	2	4	5/-	2/- to 3/-	3.5*
Sheridan Place .	2	4 1	12	4 to 8	5/6 to 8/6	3 1/6 ,, 3/6	1.4
Camden Street .	3	5 6	5	4	5/6	1/6 ,, 3/-	2
Seaforth Street .	5	4 2	23	5	6/-	1/6 ,, 3/6	2
Sandy Lane .	1	6 —		4	4/6 to 5/-		
Pleasant Grove.	2	8 3	7	4	ditto	2/3 ,, 2/6	1.7
Totals	68	5 34	260				

^{*} This only relates to two rooms

With the exception of Howe Street it will be seen that the house rents vary from 4/- to 6/6 per week, and that the sub-tenants pay from 9d. to 3/6 per week according to the accommodation provided.

It was also ascertained that there were in the Derby Road district alone, about 250 four-roomed houses (providing the scullery be counted as a room) each let at from 4/6 to 5/6 weekly, and that in the whole of the Borough about 1,700 houses of a similar rent and size existed, thus shewing that private enterprise had to some extent already met the demand for cheap four-roomed houses.

Unfortunately there are a large number of families who cannot afford to pay more than 1/6 to 3/6 per week house rent. Private enterprise does not cater for the housing of such people in separate tenements. They are, therefore, compelled to take rooms in a house never built nor intended to be used as a sub-let dwelling.

Practically all the sub-let rooms in Bootle are of this class. In each of these one or more of the following defects exist, except in the case of ground floor rooms:—

- a. No suitable and convenient water supply.
- b. No scullery nor sink.
- c. No proper place to store food.
- d. Small bedroom fireplace, quite unsuitable for cooking purposes.
- e. Bad access to water closet.

This state of affairs is not peculiar to Bootle. In nearly every large industrial centre the same conditions have to be faced.

Enquiry was also made into the vital and other statistics relating to the 685 occupied houses in the Derby Road district. The census, however, on which these figures are based was not made until the 20th January, 1909.

No. of occupied houses	No. sub-let	Average No. of persons per house,	Average No. of rooms per house used for sleeping purposes	Population Jan. 20th, 1909	Total Deaths from 1903 to 1908 (6 years)	Average No. of deaths per year	Average annual death rate per 1,000 population 1903-1908
685	260	*5.9	2.8	4,082	830	138	33.8

^{*} At the 1901 census 5.8 persons per house were found, taking the Borough as a whole.

When compared with the general death rate for the whole Borough, it is seen that the rate in the Derby Road district, taking the average of the past six years, is nearly double that for the town generally during the same period.

The Council eventually decided to apply to the Local Government Board for permission to erect 24 artizans' dwellings on land already owned by the Corporation in Falkner Crescent. This scheme provided for

8 Three-roomed tenements, each to let at 3/3 per week.

8 ,, ,, 3/9 .,

8 Four ,, ,, ,, 4/3 to 4/6 per week.

The decision of the Local Government Board, whose Inspector held an enquiry on the proposal, was that the site was not suitable for the purpose intended.

FACTORY AND WORKSHOP ACT, 1901.

The Medical Officer of Health is required to make and to transmit to the Secretary of State an annual summary of the work done under this Act. The following are copies of the official tables that must be sent to the Home Office. Additional details will be found on pages 71 and 72.

FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES AND HOMEWORK.

1.—INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises	Number of					
Tremises	Inspections	WrittenNotices	Prosecutions			
Factories	65	18	_			
(Including Factory Laundries) Workshops (Including Workshop Laundries)	604	96				
Workplaces (other than Outworkers' Premises included in Part 3 of this		ĺ				
Report)	601	30				
Totals	1,270	144	_			

2.—DEFECTS FOUND.

Particulars		N.	Number				
Tat tiennats			Found	Remedied	Referred to H.M. Inspector	Prosecuti'ns	
Nuisances under the Public	Health	Acts—					
Want of Cleanliness		• • •		69	69		*********
Want of Ventilation				1	1	_	
Overcrowding				***************************************	_		
Want of drainage of flo	ors	• 1		11	11	_	
Other Nuisances				64	64	_	
	insuffi	cient		1	1		
Sanitary		table or	1				
accommodation -		ctive		4	2	—	—
	not se	parate	for				
0.00		sexes		4	4.		
Offences under the Factory	and	Worksh	op				
Act:—	1	7.1					
Illegal occupation of un	~		ке-				
houses (S. 101)			n ta	_	_	_	
Breach of special sanita for bakehouses (SS. 9			ILLS				
011 00		00)	•				_
(Excluding offences rela	ating to	o outwe	rk			_	
which are included in							
Report)	2 602 0	0.00					
Totals				154	152		

3.—HOME WORK.

NATURE OF WORK-

Wearing Apparel—Making, &c.

OUTWORKERS' LISTS, SECTION 107-

Lists received from Employers-

		Lists	Outworkers
Twice in the year	 	20	 75
Once in the year	 	4	 6

Number of Addresses of Outworkers received from other Councils

Number of Addresses of Outworkers forwarded to other Councils

Prosecutions-

1103000000								
Failing to keep	or peri	nit in	spection	of lists	• • •	• • •	• • •	
Failing to send	llists		•••	• • •	• •		• • •	
Number of Inspecti	ions of (Outwo	rkers' P	remises	• • •	• • •		146
Outwork in Unwho	lesome	Premi	ises, Sec	tion 108	3			
Instances		• • •		• • •	• • •			1
Notices served	• • •			• • •	ø 8 *			1
Prosecutions	• • •	• • •	• • •	• • •	• • •	•••	• • •	
Outwork in Infecte	d Premi	ses, S	Sections	109 and	110—			
Instances		• • •	• • •	• • •	• • •	• • •	• • •	
Orders made (S. 110)	• • •				• • •		-
Prosecutions (SS. 109	and :	110)	• • •	• • •	• • •	• • •	_

4.—REGISTERED WORKSHOPS.

	 Number			
Bakehouses	• • •	• • •		 38
Confectionery Bakehouses			• • •	 30
Workshops and Workplaces				 173
Outworkers' Premises				 30

5.—OTHER MATTERS.

Class	Number
Matters notified to H.M. Inspector of Factories—	
Failure to affix Abstract of the Factory and Workshop	
Act (S. 133)	3
Action taken in matters referred (Notified by H.M. Insp'tor	33
by H.M. Inspector as remedi-	
able under the Public Health (
Acts, but not under the Fac- Reports of action taken,	
tory Act (S. 5) \ sent to H.M. Inspector	27
Other	3
Underground Bakehouses (S. 101)—	
Certficates granted during the year (Renewed)	18
In use at the end of 1907	18

SHOP HOURS ACT.

Under this Act a young person means anyone under the age of 18 years.

It is illegal to employ such a person for a longer period than 74 hours per week, including meal times.

Notices containing the chief provisions of the Act, must be displayed in a conspicuous place in shops.

The following is a summary of the work done under the Act:-

No. of shops visited by day		* * *	222
No. of shops visited by night	***	• • •	42
No. of instances in which the provis	sions of the A	ct were	
found not to be complied with	***		16

In every case the cause for complaint was remedied after notice.

SEATS FOR SHOP ASSISTANTS ACT.

During the year it was found necessary in only two instances to give notices under this Act. In both cases the necessary seats were provided.

BAKEHOUSES.

The details connected with the inspection of bakehouses will be found on page 71.

The number of bakehouses now on the register is 38, and to these 342 visits were made during the past year.

In 10 instances it was found necessary to call attention to the untidy condition of the tables and utensils, and in 15 others to the dirty state of the walls and ceilings.

The bakehouses are now much better kept than in former years, but the need for frequent and thorough inspection is shown by the fact that although each of them was inspected on 9 occasions in 1908, it was still necessary to draw the occupiers' attention to the undesirable conditions enumerated. Possibly, if in the future a summons was issued in one or two cases, a greater and more lasting improvement would result.

DAIRIES, COWSHEDS AND MILKSHOPS.

There are in the Borough 39 registered milkshops in addition to 34 shippons to which dairies are attached. 257 inspections of these premises were made by the Inspectors of the Health Department and any defects reported to exist were at once remedied.

Early in the year the Health Committee, on my suggestion, directed that in all cases where a notifiable infectious disease had been reported to exist on any premises, the milk vendor who supplied the occupier should be communicated with and requested not to permit his cans to be taken into the infected house until all danger was over. This plan has worked well and cannot have failed to have had a beneficial effect.

The average number of cows housed in the Bootle shippons is about 550; these are examined by the Veterinary Inspector, Mr. James Sumner, M.R.C.V.S., four times each year. The following is his report for the year 1908:—

TO THE MEDICAL OFFICER OF HEALTH.

DEAR SIR,

I am pleased to state that I found, about the average number of cows, and that they were in a very healthy and clean condition.

I think the dairymen and Health Authorities can congratulate themselves on the continued good quality and condition of the cows. They are a credit to any district, and all the dairymen seem pleased to have the cows inspected, and are most anxious that they should have a healthy stock. Any suggestion that I have made for the removal of any cow has been carried out without demur.

About six cows have been sent out during the year as being undesirables, one of these was tested with "Tuberculin." The reaction was positive and the animal afterwards removed.

About 20 samples of milk were examined and nothing suspicious of Tuberculosis was found.

The cows are kept as clean as possible when tied up in a shippon, the shippons also are clean and much better ventilated than they used to be. All milk vessels and appliances that are in evidence, seem to have a great deal of attention given to them both inside and outside.

In any new shippons that are registered I would advise that a washbasin, with a water tap, be fixed, as it is essential that the milkers should wash their hands before milking, a fact I have tried to impress on all.

Yours truly,

JAMES SUMNER, M.R.C.V.S.

SALE OF FOOD AND DRUGS ACTS, YEAR 1908.

		Total Number of Samples Analysed.	Number Reported by Analyst as Adulter- ated.	Prosecu- tions.	Result.	Remarks.
Milk	••	111	32	14	13 eonvie- tions, 1 dismissed	In the remaining 18 eases the adulteration was so trifling as not to warrant prosecution, or the vendor was warned. Amount of fines and costs, £22 ls. 6d. Analyst's fee allowed in each conviction.
Butter	• • •	47	6	_	_	These 6 adulterations were non-official samples.
Lard		1	_	_	_	—
Beer		C	_		_	de-ridate)
Rum			_	_	_	_
Whisky		A	_	_	_	_
Jam		3	_	_	_	_
Sweets		1	-	_	_	_
Sausage			<u> </u>	_	_	_
Flour		3	_	_	_	_
Vinegar			_	_	<u> </u>	_
Pepper			· -		_	_
Lime Juice Cordial			l —	_	_	_
Tinned Tomatoes			· —	-		—
Beef			_	-	<u> </u>	_
Marmalade			· -		_	GETT-UA
Honey		1	! —	_		_
Dripping	• • •	. 2	_	_	_	_
Potted Shrimps	* * *			_	_	
Glycerine	• • •	. 1	1	_		In this case the adulteration was so trifling as not to warrant prosecution.
Totals		. 200	39	14		_

Note.—In addition to the above, other samples were taken, but were not sent to the Public Analyst.

Seven samples of milk, three of meat pies, two of ice eream, two of sausages, one of tinned fish and one of potted beef, were also taken for the purpose of Bacteriological Examination by Professor Boyce at the Liverpool University.

The foregoing table shows that the largest number of samples purchased in Bootle were those of milk. This is in accordance with the recommendation of the Board of Agriculture, viz.: that the total number of samples taken should total not less than 3 per 1,000 of the population, and half of these should be milk.

WATER ANALYSIS.

Table Shewing Monthly Analyses of Water Supplied by the Liverpool Water Committee to Bootle during the Year, 1908.

COMMITTEE TO POOTIE PORTRY THE TEAR, 1900.										
Description.	Month.	Total Sclid Matter in Solution		Ammonia from Organic Matter by distillation with Alkaline Permanganate.	Nitro- gen as	Com- bined Chlorine	to or	required kidise In 3 hrs.	Total Hard- ness.	
Vyrnwy Rivington Green Lane Well	,,	4·60 9·20 32·68	·000 ·003	·006 .007 ·000	Trace Trace ·524	·90 1·40 3·40	·105 ·040 ·000	·198 ·080 ·000	1.95° 3.90° 22.28°	
Vyrnwy Rivington Green Lane Well	Feb.	4·68 9·32 33·40	·000 ·006	·006 ·008 ·000	·000 ·021 ·568	·85 1·50 3·30	·086 ·032 ·000	·179 ·074 ·000	2·0° 3·9° 22·3°	
Vyrnwy Rivington Green Lane Well	Mar.	4·28 9 80 32·80	·002 ·006 ·000	·006 ·008 ·000	·000 ·021 ·568	·85 1·40 3·40	·088 ·035 ·000	·176 ·070 ·000	2·0° 4·16° 21·16°	
Vyrnwy Rivington Green Lane Well	April	5·72 9·60 34·00	·000 ·002 ·000	·004 ·005 ·000	·000 Trace ·524	·90 1·60 3·30	·077 ·028 ·000	·159 ·071 ·000	2·5° 4·0° 21·16°	
Vyrnwy Rivington Green Lane Well	,,	5·80 10·00 34·56	·000 ·002 ·000	·007 ·007 ·000	·000 ·021 ·524	1·00 1·60 3·50	·066 ·024 ·000	·131 ·048 ·000	2·86° 4·29° 22·28°	
Vyrnwy Rivington Green Lane Well	,,	5·00 10·00 34·60	·000 ·002 ·000	·006 ·007 ·000	·000 ·021 ·524	.90 1.60 3.50	·101 ·031 ·000	·164 ·152 ·000	2·10° 4·30° 20·0°	
Vyrnwy Rivington Green Lane Well	"	4·60 10·00 34·60	·002 ·000 ·000	·006 ·004 ·000	Trace Trace ·568	·90 1·60 3·40	·091 ·016 ·000	·151 ·032 ·000	2·08° 4·10° 22·28°	
Vyrnwy Rivington Green Lane Well	,,	4.60 9.08 35.40 5.04	.000	·006 ·005 ·000	·000 ·021 ·568	.90 1.60 3.50	·086 ·024 ·000	·148 ·041 ·000	2·0° 4·16° 53·5° 2·0°	
Vyrnwy Rivington Green Lane Well Vyrnwy	,,	9·60 35·00 6·80	·002 ·000	·005 ·006 .000	·000 ·000 ·568	.90 1.50 3.50	·075 ·012 ·000	·145 ·021 ·000	2·0° 4·1° 21·75° 2·34°	
Rivington Green Lane Well Vyrnwy	"	10·00 35·40 6·00	.000	·006 ·000	·021 ·656	1·50 3·40	·012 ·000	·025 ·000 ·162	4·16° 21·75° 2·34°	
Rivington Green Lane Well Vyrnwy	,,,	$ \begin{array}{c c} 9.80 \\ 94.72 \\ \hline 5.60 \end{array} $	·001 ·000	·005 ·000	Trace ·524	1·50 3·50	·007 ·000	·014 ·000	$\frac{2.01}{4.57}^{\circ}$ 21.16° 2.21°	
Rivington Green Lane Well	,,	10·60 33·56	.000	·005 ·000	·000 ·612	$\begin{bmatrix} 1.50 \\ 3.40 \end{bmatrix}$	·011 ·000	023	5·0° 24·4°	

WATER ANALYSIS.

The monthly analyses of the water from the three sources, from which the Bootle supply is obtained, show that it is of excellent quality. It will be noted, however, that the supply from the Green Lane Well, is considerably harder than that from Vyrnwy or from Rivington.

In order to ascertain the amount of water distributed from each of these sources, and the parts of the Borough supplied with hard water, Mr. J. Parry, the Liverpool Water Engineer, was communicated with. As the information received from him is of general interest both to private users and to manufacturers, I give below the substance of his reply to my queries.

- "The whole of the Borough of Bootle is supplied with soft water from the Prescot Reservoirs, into which the Rivington and Vyrnwy supplies are delivered from the Aqueducts, excepting that certain of the higher parts of Bootle receive a supply from high pressure mains, which usually include a small proportion of water from the Green Lane Well."
- "The proportion of well water differs according to the demands of distribution, but it is only small at any time."
- "The distribution of soft water in Bootle is on the whole very uniform, and it is less liable to change than almost any part of Liverpool."

Following upon this communication an independent analysis of the water was made, the results fully bearing out the statements made by the Liverpool Water Engineer.

HOSPITAL ACCOMMODATION.

The Linacre Infectious Diseases Hospital has accommodation for 122 beds arranged as follows:—

			When Built.	Nature of Building.	Accommodation for
Block	No.	1	1885	Permanent	22 beds
, ,	, ,	2	1885	Permanent	27 ,,
,,	,,	3	1893	Temporary	20 ,,
, ,	, ,	4	1894	Permanent	16 ,,
		_	A 1885	m	18 ,,
2.2	2.2	5	$\left\{ \begin{array}{cc} A & 1885 \\ B & 1903 \end{array} \right.$	Temporary	18 ,,

The Administrative Block accommodates the Resident Medical Officer, the Matron and 13 Nurses, together with 9 other members of the Hospital Staff. This block is considered insufficient for present needs, and the advisability of increasing the accommodation has been discussed by the Committee responsible for the efficiency and sufficiency of Hospital Administration.

Block No. 3 is used for cases of Enteric Fever and contains 20 beds. Since this was built, Enteric Fever in Bootle has considerably diminished. During the past 6 years the average annual number of cases notified has only been 36, against an annual average of 98 for the previous 6 years.

Block No. 5 contains 36 beds, and was built for the accommodation of Smallpox patients. This disease having been absent from the Borough since 1903, use of the block was made during 1908 for the nursing of Scarlet Fever cases.

If the least used, *i.e.*, the Smallpox and the Enteric Fever Blocks be not counted, the Hospital has provision for 66 patients; and with the exception of cases of Typhus Fever, which occur rarely, this latter accommodation is used for Scarlet Fever and for Diphtheria cases.

In 1908, 38 Diphtheria and 364 Scarlet Fever patients were treated at the Hospital. It must be remembered, however, that during this year Scarlet Fever was unusually prevalent, and that the average annual number of cases of this disease treated at the Hospital is about 262.

During the year an application was made to the Local Government Board for power to build a Smallpox Hospital at Maghull. An enquiry was afterwards held by an Inspector of the Board, but up to the time of writing this report, the matter had not been definitely settled.

Report of Cases Treated in the Infectious Hospital, Linacre, 1908.

Resident Medical Officer—Dr. H. M. CARGIN, M.B., Ch.B., D.P.II.

Table showing cases treated in the hospital.

Diseases.	No. of Cases.	No. of Deaths.	Percentage Mortality.
Scarlet Fever	364	13	3.5
Enteric Fever	16	4	25.0
Diphtheria	38	8	21.0
Typhus Fever	- 1	_	_
Smallpox	-	_	
Other Diseases	19	4	21.0
Totals	437	29	6.6

The cases were distributed as follows:-

Bootle. Litherland Formby. 378 .. 56 ... 3

64

SCARLET FEVER.

Age.	Во	otle.	Lithe	Litherland.		mby.	Total.	Deaths.			
**50.	Males.	Females.	Males.	Females.	Males.	Females.					
0-1	2	1	_	_	_	_	3	_			
1-2	4	3	_		_	_	7	2			
2-3	11	14		1	1	_	27	2			
3-4	10	14	1		_	_	25	2			
4-5	17	16	2	3		_	38	2			
5-10	61	88	7	16	1	1	174	2			
10-15	21	35	3	8		_	67	1			
15-20	4	7	1	4	_		16	2			
20-25	1	1				_	2	_			
25-35	2	1	_	1	_	_	4				
35-45	1	_	_		_	_	1	-			
Totals	134	180	14	33	2	1	364	13			

The deaths were distributed as follows:—

	Bootle.		Litherland.		Formby.
	11	• •	2	• • •	_
Dischar	ges:—				
	Bootle.		Litherland.	• • •	Formby.

DIPHTHERIA.

A	Boo	otle.	Lithe	rland.	For	mby.		
Age.	Males.	Females.	Males.	Females.	Males.	Females.	Totals.	Deaths.
0-1			_	1	_		1	
1-2	1	1	1			-	3	1
2-3	2				_		2	1
3-4	1	2				_	3	1
4-5	1	3			_		4	2
5-10	5	8	1	3		_	17	3
10-15	2			2		_	4	_
15-20	_	2			_		2	
20-25	1	1			_		2	_
25-35	_	_			_			_
35-45			_	_	_			
Totals	13	17	2	6	_	_	38	8

One Tracheotomy Case.

The	deaths were di	stributed	as follows:-	_	
	Bootle.		Litherland.		Formby.
	6	• • •	2	•••	_
Disc	charges :—				
	Bootle.		Litherland.		Formby.
	24		6		

ENTERIC FEVER.

Age.	Вос	otle.	Lithe	rland.	For	mby.	Totals.	Deaths.
	Males.	Females.	Males	Females.	Males.	Females.		
0-5	1		_		_	<u> </u>	1	-
5-10	1	2	_				3	
10-15	3		_	_	_	_	3	2
15-20	2		_		—		2	_
20-25	1				_		1	1
25-85		3	1	_	_		4	_
85-45		1					1	1
45-55						_	_	
55-65		1		-			1	_
Totals	8	7	1			_	16	. 4

The deaths were distributed as follows:-

	Dooric.		Little Hand.		roimoy.
	4	• • •		•••	_
Discharge	s:—				
	Bootle.		Litherland.		Formby.
	11		1		_

SEWERS, ASHBINS AND ASHPITS.

The following information required by the Local Government Board has been supplied to me by the Borough Engineer.

- "The sewerage system is entirely by gravitation discharging direct into the River. The Borough is divided into four drainage districts with four separate outfalls on the River. One of these outfalls is used solely for Bootle, and one in addition conveys the sewage from Walton Gaol, situated within the City of Liverpool, one is used jointly with Liverpool, and the fourth also drains a portion of Seaforth and the greater portion of the drainage from Litherland, both Urban District Councils."
- "Speaking generally, the sewers within the Borough are so far as is known, sufficient for the needs of the Borough."
- "The sewers have good falls, and with the exception of some passage sewers, are self-cleansing, and to these sewers Automatic Flushing Tanks, supplied with salt water, are fixed at all heads, for assisting the cleansing of same."
 - "The following is a list of Ashbins and Ashpits in the Borough:-

Ashbins	3,239
Ashpits, single	1,628
Ashpits, double	4,437
Pail Closets	431
Middens, single	33
Middens, double	64

- "In connection with the Ashbins and Ashpits, Water Closets are in use. The Pail Closets, Middens and Privies, situated in the Orrell Ward, recently added to the Borough, are now in course of conversion into Ashbins and Water Closets."
- "The method adopted is to empty the Ashpits or Ashbins into light baskets, which are wheeled along the passage and emptied directly into a covered cart."

Sanitary Administration.

SUMMARY OF THE WORK DONE BY THE LADY SANITARY INSPECTORS.

No. o	of Houses found dirty	•••				• • •	476
,,,	Families visited	• • •			• • •		12,775
, ,	Houses re-visited	• • •	• •			• • •	6,284
1 2	References to Sanitary	Inspe	ctors	• • •			211
,,	Enquiry visits				• • •		148
,,	Visits to cases of mino				notifie	ed by	
	the Elementary Educ		Autho	orities	• • •		120
, ,	Sub-let Houses visited		• • •	• • •	•••	• • •	1,607
, ,	Sub-let Houses found d	lirty	• • •	• • •	• • •		290
2.2	Sub-let Houses overcro	wded	• • •	• • •			22
,,	Other infringements	•••					456
* 7	Routine visits to Midwi	ves					60
2.2	Enquiries re Still-births	3					42
, ,	Other Enquiries				•••		75
7 7	Visits made in reference	e to in	fants	under	one yea	ar of	
			• • •		• • •	•••	9,370
: 1	Total number of visits				•	v	
	Inspectors in respect	of the	e mati	ters det	ailed a	bove	11,918
	NI	JISAN	ICES				
	41	/1///	.020.				
No. o	f Complaints made by ir						377
,,	Nuisances discovered or	abov	е		• • •		466
22	Nuisances discovered or	hous	e to h	ouse in	spection	ì	5,839
,,	Notices issued to owner	S	• • •			• • •	3,214
,,	Notices issued to occupi	ers					61
2.2	Notes to Complainants			• • •			101
,,	Notes sent to comply w	ith no	tices				41
,,	Nuisances re-inspected.	•••					7,184
, ,	Water closet conversion	S	• • •	• • •			19
2.2	Ashpits substituted by l		loes n	ot inclu	ide niii	nber	
	fixed at new property)		•••	• • •	• • •	16
"		• •	• • •			* * *	2
, ,	Convictions						2
3.3	Magistrates' Orders obta			• •			1
Amo	ant of Fines and Costs .	• •		***	• / •	£1	5s. 0d.

COMMUNICATIONS SENT OUT FROM OFFICE.

References to the Borough Engineer ,, ,, Education Author ,, ,, Public Library ,, ,, House Surgeon, I ,, ,, Sunday Schools ,, ,, Day Schools ,, ,, Milk Vendors Communications re Nuisances	rities	 Hospita 	 al		241 402 676 676 190 1,215 352 300
CANAL DO	a mci	A CITI			
CANAL BO	ATS	ACT.			
Boats inspected in 1908		•••			200
Infringements:—					
Registration		• • •			_
Notification of change of	Maste	r			
Certificates	T 0 0	• • •			
Marking		• • •		•••	
Overcrowding	• • •			* * *	
Separation of the Sexes	• • •	• •		• • •	_
Cleanliness	* * *		• • •	•••	
Ventilation	• • •	• • •	• • •	• • •	
Painting and Repairing	• • •	• • •	• • •	• • •	19
Provision of Water Cask	* * *	• • •	• • •		4
Removal of Bilge Water Notification of Infectious	Diago	***	• •	•••	4
Admittance of Inspector	Diseas		• • •	• • •	
Notices sent in respect of same	• • •	• • •	• • •	•••	13
Legal proceedings taken		* * *	• • •		
nosai procedings without	•••	• • •	• • •	• • •	
CATTLE	SHII	?S.			
No. Inspected					116
,, Of Infringements reported		••			_
,,					

COMMON LODGING HOUSES.

No. registered under the Public Health Act		5
,, of day and night inspections		292
Infringements of Bye-laws:—		
Failure to cleanse walls and ceilings, &c	• • •	_
No. of informations laid in respect of infringements		_
" Convictions	•••	_
SUB-LET HOUSES.		
No. of Houses on Sub-let Register		176
,, Day and night inspections		2,517
,, Infringements of Sub-let Bye-laws	• • •	374
,, Informations laid in respect of infringements		1
STEPS TAKEN TO PREVENT SMOKE NU	JISAN	CE.
No. of Observations made		39
,, Notices served in respect of excessive black smok	e	19
,, Informations laid in default of compliance with no	tices	
,, Informations laid in default of compliance with C	rder	
Amount of Fines and Costs		
DAIRIES, COWSHEDS AND MILKSHO	OPS.	
No. of Milkshops on Register		39
,, Shippons with dairies attached	•••	34
,, Inspections made	• •	257
,, Notices served for defects	•••	
,, Notices complied with	• • •	_
,, Notices served re utensils and covering of milk ve	ssels	_
,, Notices served requiring the removal of manure		_

The occupiers of shippons and milkshops have from time to time been verbally cautioned with regard to the cleanliness of the premises, the cows, and proper storage of milk.

FACTORY AND WORKSHOP ACT.

Workshops and Workplaces (Excluding Bakehouses).

				•			· ·	
No. or	Register	• • •	• • •					173
No. of	Visits made	•••	• • •	• • •	•••			743
,,	Re-visits		• • •			• • •		59
,,,	Workrooms wit	h dirty	walls		• • •	• • •	• • •	29
17	22 2:	1 12	ceiling	gs	• • •		* * *	29
,,	22 23	1,	floors		•••	•••	• • •	6
1 1	, , ,	, ,,	lavato	ries				4
,,	Workrooms no	t proper	ly ven	tilated	• •			1
,,	Workrooms for	and ove	rcrowd	ed			•••	
,,	Defective drain	s and v	vater cl	losets		• • •	• • •	18
1 2	Miscellaneous	lefects	found	• • •		• • •		24
1 2	Notices issued	on occu	piers	• • •	• • •	• • •	• •	30
,,	15 73	own	ers			• • •	• • •	46
,,	Notices complie	ed with			• • •	• • •	• • •	76
11	References to t	he Fact	ory In	spector		• • •	• • •	13
		SHOP	HOU	RS' A	.CT.			
No. o.	f Shops visited	by day	• • •	• • •	•••	• • •	• • •	222
,,,	"	,, nigh	.t	• • •				42
,,,	Instances in	which t	he pro	visions	of the	Act	were	
	found not to	be cor	nplied	with		• •	• • •	16
,		BA	KEHC.	USES	•			
No. o	n Register			• • •		• • •	• • •	38
No. o	f Visits made		* * *				• • •	342
11	Re-visits		• • •		• • •			30
1 1	Bakehouses for	and dirt	ty (wal	ls and d	eilings))	• • •	15
,,	Notices issued	for lim	ewashi	ng			• • •	8
,,	Bakehouses lin	newash	ed with	out not	tice			23
,,	Notices for def	ective v	valls ar	nd floor	S	• • •	• • •	5
,,	Notices to repa	ir defe	ctive ce	ilings	• • •	• • •	• • •	
2.1	Notices to clea	nse tab	les, ute	ensils, e	tc.	• • •	• • •	10
	References to f	he Eac	tory In	spector				4

CONFECTIONERY BAKEHOUSES.

No. (on Register	• • •	• • •	• •	•	• • •	• • •		30
,, (of Visits made	• • •	***	• •	•	•••		• • •	120
,, (of Re-visits		* * *			• • •	• • •	• • •	. 7
,, f	ound dirty (wall	s and	ceilings)	•			•••	4
,, (of Notices issued	for li	mewashi	ing					1
,,	Notices issued	for d	efective	dra	inage		• • •	• • •	2
,,	Notices issued	l to cle	eanse flo	ors	, uten	sils,	etc.		6
,,	Notices issued	l to re	move dra	ain	S	•••	* * *	•••	_
		О	UTWOE	RK]	ERS.				
No. o	of Outworkers or	Regi	ster	• • •	•				30
,,	Visits made to	hous	es of out	wo	rkers	•••			146
,,	Re-visits			• •		• • •		• • •	7
,,	Notices served	d for	sanitary	y c	lefect	s at	houses	of	
	outworkers			٠.	•	• • •			8
7.7	Unwholesome	prem	ises			•••	• • •		_
,,	Dirty walls an	id ceil	ings	• •		• •		• • •	3
	[All th	he abou	ve notices	wer	e comp	plied 1	with.]		
0	roukowa omnlować	1 in 12	aatla	(Taile	ors or	Tailores	ses	6
	vorkers employed for Liverpool Fi		oone	}	Dres	smak	ers		11
	ior miverboor ri	11115		(Boot	Repa	airers		2
Outv	vorkers employed	l in L	iverpool	(Tailc	ors or	Tailores	ses	22
	for Bootle Firn	ıs		1	Boot	Repa	airers	••	2
		FOO	D INS	PE	CTIC	N.			
No.	of Foodshops vis	sited	• • •					• • •	684
	ount of food seiz		small o	qua	ntitie	s an	d destro	yed	
	uring the year								2 lbs.
	SUMMAR	Y O	F LEG	ΑL	PR	OCE	EDINGS	5.	
Brea	ches of Common	Lodg	ging Hou	ıse	Regul	lation	ıs	• • •	
	ches of Sub-let				_			• • •	1
	ke nuisances		• • •					• • •	
Defe	ective drains, etc.							• •	2
Filtl	ny floors, woodw	ork, e	tc				•••	• • •	_

Infringements of Sale of Food and Drugs Acts		. 14
,, ,, Midwives Act	,,	
,, ,, Factory and Workshop Act	•••	—
Establishing offensive trade without permission		
Order obtained for removal of body to Mortuary	7	
Exposure of person whilst suffering from Infect	ious Diseas	e 1
DISINFECTION.		
No. of Houses disinfected after fevers		530
,, Houses disinfected after Phthisis		58
,, Houses disinfected after Measles		. 2
,, Schools disinfected after Scarlet Fever		. 11.
,, ,, ,, ., Measles		3
., Visits made to infected houses		. 663
,, Re-visits made to infected houses		1,115
,, Houses cleaned in default of owners		. 7
,, Houses disinfected from other causes tha	n fevers	. 7
Note.—Since June, 1903, all houses with a remember or under, have been cleansed after infectious		-
stripped, and the ceilings whitened) by the Corporat	`	
stripped, and the ceilings whitened) by the Corporat FILTHY HOUSES.	ion, free of	cost.
stripped, and the ceilings whitened) by the Corporat FILTHY HOUSES. No. of Notices sent to cleanse the walls and ceilings	ion, free of	cost.
stripped, and the ceilings whitened) by the Corporat FILTHY HOUSES. No. of Notices sent to cleanse the walls and ceiling houses	ion, free of	y 168
stripped, and the ceilings whitened) by the Corporat FILTHY HOUSES. No. of Notices sent to cleanse the walls and ceilings	ion, free of	cost.
stripped, and the ceilings whitened) by the Corporat FILTHY HOUSES. No. of Notices sent to cleanse the walls and ceiling houses	ion, free of	y 168
stripped, and the ceilings whitened) by the Corporat FILTHY HOUSES. No. of Notices sent to cleanse the walls and ceiling houses	ion, free of ings of filth	y . 168 168
FILTHY HOUSES. No. of Notices sent to cleanse the walls and ceiling houses	ion, free of ings of filth	y . 168 168
Stripped, and the ceilings whitened) by the Corporate FILTHY HOUSES. No. of Notices sent to cleanse the walls and ceiling houses	ion, free of ings of filth	y
FILTHY HOUSES. No. of Notices sent to cleanse the walls and ceiling houses No. of Notices complied with List of Articles Disinfected Mattresses 646 93 Beds 651 59 Pillows and Bolsters 1,831 192	ion, free of ings of filth	y . 168 . 168 . Totals. 751
FILTHY HOUSES. No. of Notices sent to cleanse the walls and ceiling houses No. of Notices complied with List of Articles Disinfected Mattresses 646 93 Beds 651 59 Pillows and Bolsters 1,831 192 Blankets 1,219 146	ion, free of ings of filth	y . 168 . 168 . Totals. 751 721 2,049 1,399
### Stripped, and the ceilings whitened) by the Corporate FILTHY HOUSES. No. of Notices sent to cleanse the walls and ceiling houses	ion, free of ings of filth	y
### Stripped, and the ceilings whitened) by the Corporate FILTHY HOUSES. No. of Notices sent to cleanse the walls and ceiling houses	ion, free of ings of filth	y . 168 . 168
### FILTHY HOUSES. No. of Notices sent to cleanse the walls and ceiling houses	ion, free of ings of filth	y . 168 . 168
### FILTHY HOUSES. No. of Notices sent to cleanse the walls and ceiling houses	ion, free of ings of filth	y . 168 . 168
### FILTHY HOUSES. No. of Notices sent to cleanse the walls and ceiling houses	ion, free of ings of filth	y . 168 . 168

Note.—These figures do not include the ambulance bedding (one bed, one pillow and three blankets), which is disinfected after the removal of each case.

The following articles were destroyed by the request of the owners, after infectious disease:—

Mattresses	• • •	• • •			• • •		16
Pillows		• • •	• • •			• • •	
Quilts		• • •	• • •				
Miscellaneon	as	• • •	• • •			•••	
Beds					• • •	• • •	3
Blankets				•••		• •	_
Wearing Ap	parel					•••	

FLUSHING.

The flushing gang consists of two Corporation workmen, and one Liverpool waterman.

No. of	Private houses at which	drains were	flushed		13,107
) 1	Passage sewers flushed		• • • • • • •		532
,,	Public buildings at which	ch drains we	re flushed	• • •	48

An average of a day-and-a-half per week has been devoted to the flushing of premises in which cases of fever had occurred.

The drains at the Bootle Borough Hospital were flushed 17 times during the year.

The amount of fresh water used during the year was 3,531,130 gallons, with the addition of 136,500 gallons of salt water supplied from the Corporation salt water hydrants, used one half-day in each week.

During the summer months a second flushing gang was employed, whose special work was the flushing of back passages.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1908 AND PREVIOUS YEARS. TABLE 1.—COUNTY BOROUGH OF BOOTLE.

								10	,						
THS AT ALL DAGING TO	STRICT.	Rate.*	13	18.9	₹1.4	21.5	18.0	19.3	18.6	0.61	18.0	17.7	16.3	18.5	17.3
NETT DEATHS AT AGES BELONGING	THE DISTRICT	Number.	12	1,055	1,212	1,2.11	1,054	1,162	1,139	1,179	1,138	1,209	1,128	1,151	1,225
Denths	of Residents	registered in Public Instituti'ns beyond	District.	105	105	120	123	155	163	160	188	203	175	149	188
Deaths	of Non- residents	registered in Public Instituti'ns in District.	10	55	29	35.	3.4	37	39	ଚ୍ଚ	33	33	33	39	41
TOTAL	PUBLIC	INSTITU- TIONS IN THE DISTRICT.	6	113	96	91	85	101	113	855	109	83	92	26	95
District.	AT ALL	Rate.*	89	18.0	50.6	20.1	16.4	17.0	16.6	16.9	15.5	15.2	14.3	16.7	15.2
SRED IN THE	DEATHS AT	Number.	7	1,005	1,164	1,156	965	1,043	1,015	1,051	983	1,039	666	1,041	1,078
ent	UNDER OF AGE	Rate per 1,000 Births	registered.	183	981	20.1	183	154	161	081	153	143	123	165	143
Toral Dra	DEATHS ONE YEAR	Number.	ŭ	329	337	373	337	302	325	346	321	312	897	323	314
Влятия.		Rate.*	44	31.8	32.0	31.8	31.4	32.4	33.5	30.3	32.0	31.9	31.3	31.4	30.9
Bank		Number.	က	1,779	1,809	1,827	1,837	1,949	2,010	1,918	2,079	2,171	2,168	1,954	2,182
	Population estimated to	Middle of each Year.	εı	55,550	56,500	57,450	58,556	000'09	60,800	62,000	63,134	Extended 68,000	69,200	62,119	70,500
		YEAR.		1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	Borough 1906.	1907.	Averages for years 1898-1907.	1908.

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

Area of District in acres, exclusive of area covered by water—1,946 at present; 1.576 at time of Census.

Total Population at all ages, 58,556; number of inhabited houses, 10,044; average number of persons per house, 5.8—at census of 1901.

The Union Workhouse is not within the District.

TABLE 2.—COUNTY BOROUGH OF BOOTLE.

VITAL STATISTICS OF SEPARATE LOCALITIES IN 1908 AND PREVIOUS YEARS.

	Deaths under 1 year									155	21	18 urs	61
WARD	Denths at all Ages									50	55	52 18 of years	7.0
	Births registered									149	145	147 lge of	143
ORRELL	Population esti- mated to middle of each year									3,850	3,943	3,896 147 Average 1906 an	4,017
۵	Deaths under 1 year				61	69	65	68	22	26	61	68	99
WARD	Deaths at all Ages				160	526	215	192	216	250	01-2	214	266
	Births registered				379	440	45.4	128	479	498	528	458	
LINACRE	Population esti- mated to middle of each year				11,881	12,192	12,351	13,388	13,632	13,853	14,213	13,073	14,480 497
2	Destins under 1 year				83	58	92	7.9	50	62	22	67	61
WARD	Deaths at all Ages				264	972	626	281	223	269	238	261	260
RELED	Births registered				417	116	469	424	422	397	430	425	381
KNOWSLEY	Population esti- nated to middle of each year				12,245	12,548	12,715	11,578	11,791	11,981	12,177	12,148 425	12,406 381
	Deuths under 1 year				92	96	73	95	75	7.3	62	107	83
Mersey Ward	Denths at all Ages				317	338	287	348	295	279	560	303 86	30.4
SEY	Births registered				385	451	445	427	429	406	377		415
MEE	Population esti- mated to middle of each year				13,113	13,417	13,596	13,973	14,294	14,455	14,577	306°5	14,851 415
g	Deaths under 1 year				49	36	58	9#	48	35	23	42 13 Average	31
WARD	Deaths at all Ages				148	150	173	160	183	146	144	158	152
CANLEY	Births registered				288	797	273	264	297	293	249	275	278
STAN	Population esti- nated to middle of each year				11,107	11,381	11,533	11,184	11,391	11,572	11,687	11,408	11,906
	Deaths under I year				52	43	53	58	68	52	44	53	51
WARD	Deaths at all Ages				165	172	185	193	221	215	191	192	189
DERBY	Births registered				369	378	369	375	452	128	439	10f-	469
DE	Population esti- mated to middle of each year				10,210	10,462	10,602	11,877	12,096	12,289	12,603	11,448 401	12,840 469
нел	Deaths under 1 year	329	337	373	337	302	325	346	321	312	268	325 rs	314
Вовс	Deaths at all Ages	1,055	1,212	14.2,1	1,054	1,162	1,139	1,179	1,138	1,209	1,128	1,151 year	1,225
Тнв Wноге Вовосен	Births registered	1,772	1,509	1,827 1,241	58,556 1,837 1,054	60,000 1,949 1,162	2,010 1,139		2,079 1,138 321	2,171 1,209	2,168	61,119 1,954 1,151 325 Average of years 1898 to 1907	2,182 1,225
	Population esti- nated to middle of each year	55,550	56,500	57,450			008'09	62,000 1,918	63,134	68,000	69,200	61,119 Ave	70,500
NAMES OF LOCALITIES	YEAR	1898	1599	1900	1901	1903	1903	1904	1905	Extended 1906	1907		1908

TABLE 3.—COUNTY BOROUGH OF BOOTLE.

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FROM		Orrell Ward.	1	1	67	1	18	ı	63	1	1	1	1	1	23
SPITAL		ronnid braW		1	6		91	1	9	-		1	1	1	106
D TO HO		Knowsl Ward			୍ଦୀ		45	1	ŭ	1	-	1	\$ 8	1	52
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OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY.	S1 V	Stanle Vard	ı		9		25	-				-			32
No. OF		Derby Ward			10		85		67						94
CALITY. No. OF CASES RE	9	Orrell busW	ı		ī	က	56		9	1	ı	1	1	ı	40
I LOCAI		Linaci DigW		1	2	1~	153		10		1	Ç1	i	9	195
TOTAL CASES NOTIFIED IN EACH LOCALITY.		Knowsl braw		1	10	10	62	-	7	1		ଦୀ		41	06
OTIFIED	, co	Mard Ward			11	1~	65	-	61	1				11	86
INCLLFILLI		Stanle Ward	1		14	1	56		-					Q1	75
TOTAL (-	Uerby braW			16	9	136		ヸ			67		Ħ	165
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ECJ.	At Ages-Years.	5 to 15.		1	96	61	350		16	1			1	1~	371
TIFIED	At		1	ı	59	1	138	i						©1	170
CASES OF INFECTIOU		Under 1 to 5.	1		ಣ	4	7	1		1	1			ı	H
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			Small-pox	Cholera	Diphtheria—Membranous Croup	Erysipelas	Scarlet Fever	Typhus Fever	Enteric Fever	Relapsing Fever	Continued Fever	Puerperal Fever	Plague	Phthisis	Totals

TABLE No. 4.—County Borough of Bootle.

CAUSES OF, AND AGES AT, DEATH DURING YEAR 1908.

	D		S IN W				· AT				L Act		ES	TOTAL DEATHS WHETHER OF
CAUSES OF DEATH.	All ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Derby Ward.	Stanley Ward.	Mersey Ward.	Knowsley Ward.	Linacre Ward.	Orrell Ward.	"RESIDENTS" OR "NON-RESIDENTS' IN PUBLIC INSTITUTIONS IN THE DISTRICT.
Other Tubercular Diseases Caneer, Malignant Disease Bronchitis	-34 177 42 14 1 5 -9 - -53 255 48 30 5 5 3 2 104 29 55 3116 130 8 12 45 4 5 5 6 7 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7	-4 1 16 2 35 17 45 25 31 2 45 2 45 16 32	- 30	- 5 1 3 - 2 1 - 7 7 7 4 4 4 - 1 6 1 3 12	- 2 - 2 - 1 10			- 1 2 9 3 - 1 2 1 16 21 3 1 12 6 47 - 4 4 1 12 6 47 -	- 3 1 1 1 4 2 - 6 1 5 5 5 2 2 2 9 15 10 2 1 2 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- 15 3 11 4 1 - 3 - 12 5 22 6 6 - 1 2 25 5 10 0 25 5 29 2 - 2 - 9 - 14 9 - 13 46		- 6 9 11 2 - 2 - 10 4 10 6 1 - 26 5 14 16 37 2 3 2 - 6 4 9 2 2 11 10 56		- 15 - 5 - 4 - 1 - 1 1 2 2 2 2 2 2 2 2 2 3 6 1 - 4 28 2 - 17
All eauses	1225	314	183	57	52	408	211	189	152	304	260	266	54	95

I. Institutions within the District receiving sick and infirm persons from outside the District— Linaere Infectious Diseases Hospital; Bootle Borough Hospital.

II. Institutions outside the District receiving sick and infirm persons from the District—Mill Road Infirmary; Belmont Road Workhonse; Walton Workhouse; Rainhill Asylum; Royal Infirmary; Stanley Hospital; Northern Hospital; Southern Hospital; Children's Infirmary; Consumption Hospital; Hospital for Women; Turner Memorial Home; St. Joseph's Home; Home for Incurables.

III. Other Institutions, the deaths in which have been distributed among the several localities in the District—Nil.

Is the Union Workhouse within the District ?- No.

TABLE 5.—INFANTILE MORTALITY DURING THE YEAR 1908.

Deaths from Stated Causes in Weeks and Months under One Year of Age.

		79
	Total Deaths under One Year.	298 16 16 11 11 45 6 6 6 6 11 11 11 11 11 11 11
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	10-11 Months.	6
	silinolf 01-6	9
0	8-9 Months.	
	.sdfmolf 8-7	
ľ	6—7 Months.	
ı	5-6 Months.	22 m
ı	4-5 Months.	23
1	3—4 Months.	9-111122 00 110 111122
ı	2-3 Months.	\$\frac{62}{12} \text{cc}\$ \tau \tau \tau \tau \tau \tau \tau \tau
	1-2 Months.	26 1 1 1 1 2 2 1 1 1 1 1 2 1 2 1 4 1 1 2 1 2
	Total under I Month.	
	3-t Weeks.	1 1 1 1 1 1 1 1 1 1
	2-3 Weeks.	13 12 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	1—2 Меекв.	13 - 13 - 13 - 13 - 13 - 13 - 13 - 13 -
	Under 1 Week.	6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
4	CAUSE OF DEATH.	Causes Uncertified

Population, estimated to middle of 1908, 70,500. Deaths in the year of { legitimate infants ... 294 illegitimate infants ... 20

Deaths from all Causes at all ages, 1,225.

BOOTLE CORPORATION INFECTIOUS DISEASES HOSPITAL.

STATISTICS FOR FIVE YEARS ENDED 31ST MARCH, 1909.

1904-5.	1905-6.	1906-7.	1907-3.	1000.0	Total for
	1904-5. 1905-6.			1908-9.	five years.
£ 2,467	£ 2,723	£ 2,957	£ 2,851	£ 3,052	£ 14,050
339 406	339 397	339 387	339 378	339 369	1,695 1,937
3,212	3,459	3,683	3,568	3,760	17,682
	20 350	46 405	29 314	20 487	59 1,844
321	370	451	343	507	1,903
20	46	29	20	43	43
12,767	14,962	18,499	14,408	22,553	83,189
35.0	41:0	51.0	39.4	61.8	45.6
39.7	40.4	41.0	42.0	44.9	43.7
s. d. 3 10·4 £7 13 8·5	s. d. 3 7·7 £7 7 2·3 £66 8 3				
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Cases. Days 241 44·9 25 32·6 52 20·4 — — — 3 20·0	$\begin{array}{cccc} 306 & 43.7 \\ 17 & 26.7 \\ 45 & 25.0 \\ 1 & 12.0 \\ 1 & 2.0 \\ \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	264 45·8 36 35·3 43 24·5 — — —	433 47·Í 21 27·0 51 30·6 — — — 2 14·0	
	2,467 339 406 3,212 33 288 321 20 12,767 35.0 39.7 s. d. 3 10.4 £7 13 8.5 £70 9 9 s. d. 1 2.0 Cases. Days 241 44.9 25 32.6 52 20.4 ———————————————————————————————————	2,467 2,723 339 339 406 397 3,212 3,459 33 20 288 350 321 370 20 46 12,767 14,962 35.0 41.0 39.7 40.4 s. d. 3 7.7 £7 13 8.5 £7 7 2.3 £70 9 9 £66 8 3 s. d. d. 3 7.7 £7 12.3 £70 9 9 £66 8 3 s. d. d. 1 2.0 11.8	2,467 2,723 2,957 339 339 339 3,212 3,459 3,683 33 20 46 288 350 405 321 370 451 20 46 29 12,767 14,962 18,499 35·0 41·0 51·0 39·7 40·4 41·0 8. d. 8. d. 8. d. 3 10·4 3 7·7 2·3 £7 13 8·5 £7 7 2·3 £6 11 1·6 £70 9 9 £66 8 3 £57 19 7 8. d. 11·8 9·4 9·4 45 25·0 66 25·3 52 20·4 45 25·0 56 25·3 52 20·4 45 25·0 56 25·3 7 12·0 3 32·0	2,467 2,723 2,957 2,851 339 339 339 339 3,212 3,459 3,683 3,568 33 20 46 29 288 350 405 314 321 370 451 343 20 46 29 20 12,767 14,962 18,499 14,408 35·0 41·0 51·0 39·4 39·7 40·4 41·0 42·0 s. d. 3 10·4 £7 13 8·5 5.7 7 2·3 £6 11 1·6 £8 6 2·8 £70 9 9 £66 8 3 £57 19 7 £72 7 2·5 s. d. 1 2·0 11·8 9·4 11·9 cases. Days 241 44·9 264 45·8 36 35·3 25 32·6 52 20·4 17 26·7 45 25·0 56 25·3 1 20·0 20·3 32·0 20·3	2,467 2,723 2,957 2,851 3,052 339 339 339 339 339 369 3,212 3,459 3,683 3,568 3,760 33 20 46 29 20 288 350 405 314 487 321 370 451 343 507 20 46 29 20 43 12,767 14,962 18,499 14,408 22,553 35·0 41·0 51·0 39·4 61·8 39·7 40·4 41·0 42·0 44·5 \$. d. 3 7·7 £6 11 1·6 £8 6 2·8 £6 0 4·7 £7 13 8·5 £7 7 2·3 £6 11 1·6 £8 6 2·8 £6 0 4·7 £70 9 9 £66 8 3 £57 19 7 £72 7 2·5 £49 7 8·4 \$. d. 11·8 9·4 11·9 7·5 \$. d. 12·0 350 44·6 26·4 45·8 43·3 47·1 25·32·3 36·35·3·3 21 27·0 21 27·0 \$. 20·4 45·25·0 56·25·3

Table showing the number of deaths in each street during each month of the year.

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	LOCALITIES.	Howe Street Humphrey Street	Ibstock Road Irlam Road Ivanhoe Street	Jersey Street Johnstone Street July Street June Street	Keble Road Keble Road Kenilworth Street Kent Street Keppel Street	Kings Ko.a Kipling Street Kirby Place Kirk Street Krowsley Road	Laburnum Place Lamb's Terrace Lanark Road Langdale Street Lathom Road Leicester Road Linacre Lane Lincoln Street	
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